Accounting for NFTs

Issues In-Depth

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Contents

Foreword 1

About this publication 2

In a snapshot 3

Background 4

1. General principles 7
    - Identifying each party's rights and obligations 7
    - Accounting considerations by role 7
2. NFT sellers 9
    - Accounting for NFT costs 9
    - Accounting for NFT sales 10
3. NFT purchasers 23
    - Accounting for obtained rights 23
    - NFTs purchased with crypto intangible assets 24
    - Purchaser-paid minting costs 24
    - Sell-on royalties 24
    - Resale 25
    - Derecognition 25
4. NFT marketplaces 26
5. NFT custodians 27
    - Depositor is accounting owner 27
    - Custodian is accounting owner 28

Additional resources 29

KPMG Financial Reporting View 30

Acknowledgments 32

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An evolving landscape

NFT use cases and offerings continue to evolve and proliferate but there is currently no explicit US GAAP that directly addresses the accounting for digital assets, including NFTs. In this publication, we provide an overview of relevant accounting guidance and spotlight some of the unique and challenging fact patterns that can arise when analyzing the accounting for nonfungible tokens (NFTs) from the perspective of the players commonly in the NFT ecosystem (e.g. NFT sellers, purchasers, marketplaces and custodians).

The issues and considerations we identify in this publication are not exhaustive, and our views and observations may not reflect the only acceptable approaches applied in practice. Our perspectives may change as practice evolves, if the FASB establishes or amends US GAAP or if the SEC staff expresses views. We encourage entities to discuss their digital asset accounting and specific facts and circumstances with their auditors or other accounting advisors.

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About this publication

The purpose of this Issues In-Depth is to assist you in accounting for NFT transactions.

Organization of the text

Our commentary is referenced to the FASB's Accounting Standards Codification® and to other literature, where applicable. The following are examples:

- 606-10-25-1 is paragraph 25-1 of ASC Subtopic 606-10
- ASU 2016-08.BC13 is paragraph 13 of the basis for conclusions to Accounting Standards Update 2016-08
- CON 8.E17 is paragraph E17 of FASB Statement of Financial Accounting Concepts No. 8
- SAB 121.Q1, n9 is Question 1, note 9 of SEC Staff Accounting Bulletin 121
- AICPA Digital Asset Guide Q10 is Question 10 of AICPA Practice Aid: Accounting for and Auditing of Digital Assets

Future developments

No explicit US GAAP exists around the accounting for NFTs. In addition, this is an evolving area; NFT use cases and designs continue to evolve and change. This means some positions herein may change, and positions on new or previously unidentified issues may emerge.

Abbreviations

We use the following abbreviations in this publication:

ETH	Short for ether, the native crypto token of the Ethereum blockchain
FLOW	The native crypto token of the Flow blockchain
IP	Intellectual property
NFT	Nonfungible tokens
SOL	The native crypto token of the Solana blockchain
SSP	Stand-alone selling price
WETH	'Wrapped' ETH

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In a snapshot

Amidst the excitement of this revolutionary technology, it can be easy to think of an NFT as a new product or asset to be sold or held in and of itself. After all, a bitcoin (BTC) or ether (ETH) token is itself a unit of value. Why would an NFT be any different?

A BTC or ETH's fungibility and acceptance as an independent unit of exchange gives it value in the marketplace, even though it confers no continuing contractual rights or obligations on parties selling or purchasing the token. Conversely, an NFT, by definition and design, represents, and therefore derives its value from, a unique collection of rights and obligations memorialized on the applicable blockchain (e.g. Ethereum, Solana or Flow). For example:

- The *purchase* of an NFT frequently confers on the purchaser (1) a *right* to use the seller's (or another creator's) IP and, potentially, other rights (e.g. to attend one or more future events or exclusive access to *future* NFTs), as well as (2) an *obligation* to abide by the terms of the license and other terms and conditions (e.g. to pay a royalty to the seller and/or IP creator if the purchaser resells the NFT).
- By contrast, the *sale* of an NFT may grant the seller rights to present (and potentially future) consideration, as well as *multiple* obligations; for example, to transfer a license to underlying IP (e.g. a digital image or video), to provide other goods or services and refrain from licensing the IP to another party.

Correctly identifying the rights conveyed and obligations conferred by the NFT and properly assessing them under the appropriate US GAAP is critical to accurate NFT accounting.

Once the rights and obligations and applicable US GAAP are completely and accurately identified, an entity's accounting for the sale or purchase of an NFT should not, in general, differ from that which would result from a non-NFT arrangement giving rise to the same rights and obligations.

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Background

To understand the accounting for NFTs, it is important to first level set on common NFT use cases and the fundamental question of what an NFT actually *is*.

Common use cases

Use cases for NFTs have expanded, and are continuing to expand, rapidly. Common examples include (not exhaustive, and many NFTs combine two or more of these):

- sale of digital art or media;
- licenses to digital art or media;
- licenses to avatars and related upgrade features (e.g. upgraded 'skins');
- virtual goods to be used by players on gaming platforms (e.g. weapons, clothing, enhanced player capabilities);
- tickets to virtual or real world (IRL) events;
- 'tokenized' ownership of physical assets such as tangible collectible assets (e.g. designer sneakers or clothing items);
- exclusive or early access rights to future NFTs or other goods or events; and
- blockchain title registry for virtual and tangible assets.

Complementary or related goods and services are also frequently part of the NFT transaction and should not be overlooked by either the NFT seller or the NFT purchaser in their accounting. Examples include the following (not exhaustive).

- **Hosting services** – e.g. the seller may promise to host (or pay to have hosted) the IP licensed under the NFT for a period of time to ensure its continued accessibility to the NFT holder.

- **Rights to specified or unspecified future benefits** – e.g. the seller may explicitly or implicitly promise the NFT holder (1) admittance to specified or unspecified future events or (2) early/exclusive access to future NFT releases (or 'drops').

- **Custodial or wallet services** – e.g. the seller may promise to hold (or custody) the NFT.

- **Storage** – e.g. the seller may promise to store an underlying tangible good, such as an article of designer clothing or a piece of artwork, to which the NFT grants ownership rights for the NFT holder.

What *is* your NFT?

There is often a misconception that the NFT is, itself, either (1) the good being transferred (instead of, for example, the license conveyed *by* the NFT), or (2) synonymous with the underlying IP (e.g. the digital image to which the purchaser obtains a license *through* the NFT).

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The NFT is, in fact, neither of those things. It is simply data memorialized on the applicable blockchain inside a 'smart contract'. A smart contract automatically executes specific actions when pre-programmed conditions are met or specified events occur. It is, in effect, an 'if-then' statement programmed on to the blockchain. An NFT smart contract governs the NFT's ownership and transfer once minted. An NFT smart contract *can* be as simple as *if* an NFT purchaser pays 5 ETH, *then* the NFT will transfer to the purchaser's digital wallet.

The NFT smart contract is also where a sell-on royalty (i.e. a payment to the original NFT owner, an NFT marketplace or the content/IP owner) can be programmed to occur automatically with each resale of the NFT (note: the existence of the royalty may also be observable in the NFT's metadata or through other means, such as specified on a marketplace sale page for the NFT). It may require programming expertise to 'read' and interpret a smart contract; however, it is often possible to identify terms of an NFT's smart contract – e.g. any sell-on royalty provisions – through alternative means.

Every NFT is identified by a unique token ID that gets embedded inside its smart contract. The token ID is paired with the contract address to create a unique and identifiable asset on the blockchain that cannot be replicated.

An NFT's metadata describes the NFT; correspondingly, it generally includes the following (not exhaustive):

- the token ID;
- a name (or other identifier) for the IP (e.g. a name for the avatar or character being licensed under the NFT);
- a description of the IP (e.g. a description of the avatar, image or character's digital appearance);
- the web address to any off-chain terms and conditions that apply to the NFT owner (e.g. terms of the IP license, such as restrictions on how the NFT owner may use the licensed IP);[1] and
- information about where to download the underlying IP (e.g. web and/or IPFS or Arweave address).[2]

Storing data on a blockchain is, in general, costly. Therefore, a digital image or media sold or licensed via the NFT is typically not stored on the blockchain; neither, in general, are terms and conditions (or similar, such as terms of

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[1] The terms and conditions often referenced in an NFT's metadata are often voluminous (e.g. would be many pages if printed), similar to terms and conditions under other forms of contract. The 'Terms of Service' linked to the example metadata above meet this description.

[2] IPFS stands for 'InterPlanetary File System'. IPFS is a distributed file system that uses 'content addressing' instead of web addressing (e.g. www.XXXX.com). Arweave is another decentralized, distributed file system. Read more about Arweave here.

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service) that give rise to or define rights and obligations associated with the NFT.

An NFT’s metadata can usually be accessed through a blockchain explorer, such as Etherscan (for Ethereum-based NFTs) or Solana’s block explorer (for Solana-based NFTs). On some NFT marketplaces, parties can access an NFT’s metadata directly from the applicable sale page (e.g. a hyperlink on the NFT’s token ID may link directly to the NFT’s metadata).

Below is an anonymized example of the actual metadata for an NFT minted under the ERC-721 token standard (i.e. the most commonly used data standard for NFTs presently) on the Ethereum blockchain; it contains each of the metadata items exemplified above.


```
{"name":"CHARACTER NAME","description":"CHARACTER NAME is created with SELLER’s characteristic BRAND caricature. The eyes and smile are rendered as pixelated 3D elements, while the alien’s outline is boldly defined by a black outline that highlights the CHARACTER’s dimensionality and depth. CHARACTER NAME has been associated with the early days of SELLER and SELLER culture because of its resemblance to the original BRAND and simplistic tone. It carries on the old school traditions while translating them into a new, modern medium.\n\n---\n\n[Click here](https://nft.SELLER.com/n/46 DIGIT ALPHANUMERIC IDENTIFIER) if you have purchased this NFT and wish to\nconnect it to your SELLER account.\n\n[Learn More About SELLER NFTs](https://nft.SELLER.com).\n\n[View the Terms of Service](https://nft.SELLER.com/terms).","external_link":"https://nft.SELLER.com/n/46 DIGIT ALPHANUMERIC IDENTIFIER ","image":"https://ipfs.io/ipfs/46 DIGIT ALPHANUMERIC IDENTIFIER ","attributes":[]}
```


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1. General principles

Identifying each party's rights and obligations

In general, applying US GAAP requires an entity to identify the rights and obligations arising from a contract or transaction to properly account for it. As outlined in Common use cases, NFTs frequently give rise to *multiple* rights and obligations; for example:

- as **purchaser**, *rights* to an IP license and additional services and *obligations* to pay the promised consideration and abide by the terms of the IP license; and
- as **seller**, the *right* to specified consideration (e.g. initial sale price and sell-on royalties) and *obligations* to grant the IP license and provide the additional services.

A seller also needs to consider whether it has made any *implied* promises to its customer when it accounts for an NFT sale under Topic 606 or Subtopic 610-20 (see Accounting models and Implied promises).

The rights and obligations underlying an NFT typically derive, and therefore can be identified from, one or a combination of the following:

- the terms and features of the NFT's smart contract;
- terms and conditions (or terms of service) incorporated into the NFT via its metadata; and
- the protocols of the relevant blockchain on which the NFT was minted and resides (which both parties accept as a condition of transacting thereon).

However, in general, the obligations of all parties to the smart contract, and to their transacting on the applicable blockchain, must be completely fulfilled before the smart contract will execute (and the NFT transfer from seller to purchaser).

Depending on the circumstances, the jurisdiction that will govern the transaction (e.g. the State of New York) may be specified (e.g. in terms and conditions incorporated into the NFT's metadata). If no jurisdiction is specified, judgment may be involved in determining the laws and regulations that apply, and therefore whether any rights or obligations are created or nullified thereby.

Accounting considerations by role

In the sections that follow, we look at common participants in the NFT ecosystem and key accounting considerations for each of them. The considerations outlined are not exhaustive; other considerations may also apply. The participants we discuss are:

- NFT sellers;
- NFT purchasers;
- NFT marketplaces; and

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- NFT custodians (for purposes of our discussion, this includes both custodial and non-custodial wallet service providers).[3]

[3] With a custodial wallet, the custodian holds the private cryptographic keys necessary to execute a transaction with those digital assets, while with a non-custodial wallet, the individual or entity maintains its own private cryptographic keys.

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2. NFT sellers

An NFT seller may be the original seller of the NFT or a reseller (e.g. an entity that originally purchased the NFT for its own use or as an investment). It also may or may not be the original *issuer* of the NFT – i.e. the entity that originally minted the NFT, licenses the underlying IP to the NFT holder and, typically, establishes the terms and conditions that apply to the NFT.

The NFT seller also may or may not be the owner or the creator of any underlying IP. For example, the NFT seller may solely have licensed the underlying IP from the creator or current IP owner. We have observed scenarios where an NFT seller obtains a license to the underlying IP from the IP's creator-owner, and then sublicenses that IP through the sale of an NFT it mints. An entity's intent to re-license the IP via an NFT does not change how it should account for its head license as compared to a scenario where it re-licenses the IP to another party other than through an NFT.

Accounting for NFT costs

Creators of licensed or sold IP

Creators and owners of IP intended to be sold or licensed via an NFT account for their IP development or acquisition costs in the same manner as any other developer or acquirer of IP. That is, the creator or owner's intent or plan to sell or license its developed or acquired IP via NFT – i.e. versus another method – does not change how the entity accounts for its development or acquisition costs (e.g. under Topic 926 or Topic 928 for film or music costs, respectively).

Minting costs

NFTs do not exist until they are 'minted'. Minting is the process of, in effect, 'attaching' digital data to the applicable blockchain. Costs incurred by an issuer to mint an NFT are *not* the same as the costs to develop or acquire IP that will be licensed or sold via an NFT or to acquire a physical good (e.g. a unique article of clothing) the ownership of which will be transferred via an NFT.

Costs to mint an NFT may include (not exhaustive):

- blockchain transaction, or 'gas', fees; and
- costs to code the NFT's smart contract and metadata.

While minting NFTs bears some similarities to producing inventory, NFTs do not meet the US GAAP definition of 'inventory' because they are intangible. [ASC Master Glossary]

We are aware of different views on the accounting for minting costs. Two views about the guidance that applies to those costs are:

- **External-use software under Subtopic 985-20.** Minting costs are in the scope of Subtopic 985-20 (costs of software to be sold, leased or marketed) because they are incurred to create an externally transferrable software

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token and its underlying, executable smart contract (which resides externally from the issuer on the blockchain).

- **Non-software costs to which other US GAAP applies.** The guidance in Subtopic 926-20 (film costs) on 'exploitation costs' may apply if the NFT conveys a license to video IP, while the fulfillment costs guidance in Subtopic 340-40 (costs of contracts with customers) would apply if no other specific US GAAP applies (such as that on film costs). Those of this view do not believe the external-use software costs guidance applies because, while NFTs and their underlying smart contracts exist on a blockchain and therefore are *software-based*, they do not believe these items constitute 'software products' that would be in the scope of Subtopic 985-20. [985-20-55-1]

In addition to different views about the guidance to apply, we are also aware of different views on what costs may qualify for capitalization under the different guidance.

This is an emerging area of debate for which explicit US GAAP does not exist and we are unaware of any positions taken on the accounting for minting costs by the FASB or the SEC staff; therefore, we encourage entities to discuss their specific facts and circumstances with their auditors and other accounting advisors. We believe that the acceptability of one or both views on scope outlined above, or another view, and what costs qualify for capitalization may depend on those facts and circumstances.

KPMG Handbook, Software and website costs, provides detailed guidance on the scope of and the accounting for external-use software development costs under Subtopic 985-20.

Chapter 12 of KPMG Handbook, Revenue recognition, provides guidance on the scope of and accounting for contract costs under Subtopic 340-40.

Lazy minting

In some NFT transfers, the NFT is not minted *until* it has been purchased (a process often referred to as 'lazy minting') and the purchaser pays those costs. An NFT purchaser's accounting for minting costs is discussed in the NFT purchasers section.

Accounting for NFT sales

Accounting models

The appropriate US GAAP to apply to an NFT sale depends on the enforceable rights and obligations the NFT conveys, so there is not one single model that determinatively applies to all NFT sales. However, in general, most NFT sales we have observed to date are governed by either:

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- Topic 606 if the goods and/or services conveyed by the NFT are an output of the seller's 'ordinary activities' (see section 2.2.10 of KPMG Handbook, Revenue recognition); or
- Subtopic 610-20 if they are not.

Our experience notwithstanding, an NFT sale transaction may not be entirely in the scope of either Topic 606 or Subtopic 610-20. For example, an NFT might convey the right to a good (e.g. license) or service in the scope of Topic 606 or Subtopic 610-20 *and* another element, such as a derivative subject to Topic 815 (derivatives and hedging) or a financial asset subject to Topic 860 (transfers and servicing). Sections 2.4 and 17.2.60 of KPMG Handbook, Revenue recognition, discuss transactions that are only partially in the scope of Topic 606 or Subtopic 610-20, respectively, and partially in scope of another Topic.

Key assumption

The remainder of this publication assumes, consistent with our experience to-date, that the consideration to which the NFT seller is entitled from the NFT sale relates to the provision of goods and/or services in the scope of Topic 606 or Subtopic 610-20. Further, because Subtopic 610-20 requires an entity to apply the principles in Topic 606 to determine the gain or loss resulting from the sale of a nonfinancial asset (see section 17.3.10 of KPMG Handbook, Revenue recognition), we do not differentiate in the accounting discussion that follows between NFT sales subject to Topic 606 and those subject to Subtopic 610-20.

See sections 2.2 and 17.2 of KPMG Handbook, Revenue recognition, for guidance on identifying contracts with customers in the scope of Topic 606 and sales of nonfinancial assets in the scope of Subtopic 610-20, respectively.

Topic 606 five-step model

In this section, we highlight key considerations around applying the Topic 606 five-step model to NFT sales. The following are key questions that often significantly affect its application (not exhaustive).

What key questions should you be asking?

- Are you a principal to the sale of the NFT (i.e. instead of an agent)? If so, who is your customer for the sale (e.g. a purchaser or an NFT marketplace)?
- If IP is involved, does the purchaser acquire ownership of the IP or solely a license to that IP? If the latter, is the IP functional or symbolic?

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What key questions should you be asking?
• Is any part of the transaction price variable and, if so, is the variable consideration a sales- or usage-based royalty? • Is the seller promising to host the underlying IP (e.g. digital media or image) for a period of time? If so, does the customer have the right, and is it feasible for the customer to take possession of a copy of the IP? • Is the seller promising to provide or arrange for custody of the NFT? • Is the seller promising, or offering the option, to store a physical good? • Does the NFT provide the purchaser with any options (e.g. to buy specified or unspecified goods or services in the future) it would not otherwise have but for the NFT purchase? • If the NFT contains multiple performance obligations with different revenue recognition patterns (e.g. one performance obligation that is satisfied upfront, another that is satisfied over time or two performance obligations that are satisfied over different periods of time), how will the SSPs (sellers) of promised goods and services be determined? • Will payments for the NFT be made in crypto assets (e.g. ETH, SOL or FLOW)?

Step 1: Identify the contract

A contract likely exists under Topic 606 when the NFT transfers via its smart contract. At that point in time, the parties have fulfilled their respective obligations to trigger execution thereof. Correspondingly, we believe, in general: [606-10-25-1]

- the parties have accepted and approved the conditions of the smart contract necessary to transfer the NFT from the seller to the purchaser;
- the parties have accepted and approved any terms and conditions (or terms of service) incorporated into the NFT;
- the transfer has commercial substance – i.e. the seller now owns the crypto assets or fiat consideration paid for the NFT, while the purchaser is now entitled to the rights (e.g. the right to use the underlying IP or to attend the specified event) conveyed by the NFT; and
- collectibility of the NFT transaction price is effectively certain because transfer of the crypto asset or fiat consideration is a condition to execute the smart contract (i.e. the consideration transfers concurrently with the transfer of the NFT).

Identify the customer

An NFT issuer is a principal (versus an agent) to the initial sale of an NFT it issues. It is the issuer that decides to mint the NFT and sell the goods and/or services embodied therein. An entity that owns and then resells an NFT is similarly also a principal because it controls the rights conveyed by the NFT before it resells the NFT. [606-10-55-37, ASU 2016-08.BC13]

Therefore, the relevant question for an NFT seller is whether its customer for Topic 606 purposes is the NFT purchaser or, instead, an intermediary such as an NFT marketplace (if one is involved). When an intermediary such as an NFT

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marketplace is involved in an NFT sale, we believe the principal versus agent considerations guidance in Topic 606 provides an appropriate framework to make this determination.

If, under that guidance, the intermediary is the principal in the NFT sale to the purchaser, then the seller's customer is the intermediary. If, instead, the intermediary is solely an agent in that sale, then the seller's customer is the purchaser.

- If the purchaser is determined to be the seller's customer, the seller records the entire NFT fee paid by the purchaser as revenue, and any portion of that fee paid to an intermediary generally as an expense (**gross basis**).
- If the intermediary is determined to be the seller's customer, the seller records only the portion of the NFT fee it receives from the intermediary as revenue (**net basis**).

The NFT marketplaces section addresses principal versus agent considerations for those entities.

Step 2: Identify the performance obligations

In our experience, the most complex step of the Topic 606 model applied to NFTs is completely and accurately identifying the performance obligations (i.e. the sale units of account) arising from the NFT sale.

Within step 2 of the Topic 606 model, and discussed separately below, are two discrete sub-steps.

- **Step 2a: Identify the promised goods and services**. The first step to completely and accurately identifying the performance obligations in an NFT sale transaction is to completely and accurately identify all of the promises the seller makes to the customer.
- **Step 2b: Identify the separate performance obligations.** After identifying the promised goods and services, a seller determines which of those promised goods and services are separate performance obligations.

Chapter 4 of KPMG Handbook, Revenue recognition, discusses step 2 of the Topic 606 model (and each of the above sub-steps) in detail.

Step 2a: Identify the promised goods and services

Completely and accurately identifying the promised goods and services conveyed by an NFT can be complicated. In this section, we address key points of complexity.

Is the NFT a promised good or service?

As outlined previously herein, the NFT is generally *not* itself a promised good or service; it is the vehicle that identifies and, in some cases, facilitates the transfer of the promised goods and services (e.g. when its metadata provides the purchaser with the web or IPFS address from which to download a copy of licensed IP).

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Commonly promised goods and services

The following are goods and services often promised in NFT transactions (not exhaustive).

- Digital art or media (i.e. ownership thereof)
- Licenses to digital art or media
- Licenses to avatars and related upgrade features (e.g. upgraded 'skins')
- Virtual goods used on gaming platforms (e.g. weapons, clothing, enhanced player capabilities)
- Tickets to virtual or real world (IRL) events
- Physical assets such as precious metals, bonds or tangible collectible assets (e.g. character figurines or designer clothing items).
- Hosting services – e.g. the seller promises to host licensed IP for a period of time to ensure its continued accessibility to the NFT holder
- Rights to specified or unspecified future benefits – e.g. the seller may explicitly or implicitly promise the NFT holder (1) admittance to specified or unspecified future events or (2) early/exclusive access to future NFT releases (or 'drops')
- NFT custodial or wallet services – e.g. the seller may promise to hold (or custody) the NFT
- Physical goods storage – e.g. the seller may promise to store a physical good (e.g. artwork or a pair of designer sneakers) sold via an NFT

It is also important to recognize that these promised goods and services typically transfer *with* the NFT, meaning they transfer to all future purchasers (via resale) of the NFT. For example, an original NFT seller's promise to its customer to host the underlying IP or provide online gaming services on which a virtual good licensed via the NFT depends for its utility will typically transfer to all future purchasers (via resale) of the NFT. [606-10-25-18(g), ASU 2014-09.BC92]

In addition to the possibility of 'missing' one or more of these promised goods or and services (or others), an NFT seller may mis-identify one or more of them. For example, an NFT seller may not accurately identify when an NFT only conveys a right to *use* underlying IP instead of ownership of that IP. Additional complexities around licensing are discussed in the Licensing section.

Implied promises

While the relevant promised goods or services are usually explicitly stated in the contract, under Topic 606, promised goods and services can be *implied*. An *implied* promise exists if a customer has a reasonable expectation – e.g. based on specific statements, established business practices or published policies of the seller – that the seller will provide that good or service. An implied promise does not need to be legally enforceable to trigger seller accounting under Topic 606. [606-10-25-16, ASU 2014-09.BC87]

In the context of NFTs, an NFT seller should be cognizant of promises it may imply, for example, by its promotion of the NFTs (e.g. on its website or other forums) or other actions (e.g. a past practice of hosting exclusive NFT holder-only events or giving NFT holders early and/or exclusive access to other NFTs).

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Another implied promise may be to provide NFT custodial or non-custodial wallet services, even if there is no fee associated with those services and they are not advertised as an added benefit of transacting with the NFT seller. In an NFT sale, a seller may provide the purchaser with custodial services or a non-custodial digital wallet in which the purchaser can hold its NFT(s) acquired from the seller. Unless the NFT seller also provides such services to noncustomers for free (e.g. individuals or entities that have not purchased an NFT from the seller can transfer their NFTs or other digital assets acquired elsewhere into the provided wallet for no fee), the right to these free services likely gives rise to a material right performance obligation to which a portion of the NFT fee must be allocated (see Step 4: Allocate the transaction price).

KPMG Hot Topic, Evaluating custody of digital assets, outlines in additional detail considerations about when an implied promise to provide digital asset (including NFT) custodial services exists.

See additional considerations around holding NFTs for others in the NFT custodians section.

Is the promise to provide the good or service or to transfer a right to that good or service?

When the NFT seller is the original issuer of the NFT (rather than another party), it provides the underlying promised goods or services described in the preceding subsections. That is, it is the party granting the IP license, arranging the event(s) to which the NFT holder has rights, ‘dropping’ the future NFTs to which the NFT holder gets early or exclusive access and establishes the terms and conditions that apply to the NFT (e.g. is the party linked to the terms of service in the NFT’s metadata).

By contrast, we believe an NFT reseller will typically conclude that its performance obligation is to transfer its *rights* to the goods and/or services embedded in the NFT, *not* to provide those goods or perform any services itself. As outlined in the Identify the customer section, while an entity that has purchased and is reselling an NFT will typically be a principal to that resale (versus an agent), that is precisely because it controlled *the rights* to the goods and services conveyed by the NFT before the resale occurs. An NFT reseller typically will have no role in granting any IP license embedded in the NFT or in providing services to an NFT holder. In addition, the reseller is generally invisible to the purchaser (by virtue of blockchain anonymity). This contrasts with the NFT issuer that will generally remain visible and known to the resale purchaser as the licensor and service provider – e.g. in the example NFT metadata provided earlier, the NFT issuer remains named in the NFT’s metadata regardless of how many times the NFT is resold.

Licensing

The following are pivotal questions around an NFT seller’s accounting when IP is involved (as it often is).

- Does the NFT convey ownership of the IP or merely rights to *use* it?
- If only rights of use are conveyed, are those rights a license or a service?
- If there is an IP license, is the IP ‘functional’ or ‘symbolic’?

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Each of these questions is examined below.

License vs ownership of IP

Ownership of the NFT should not be confused with ownership of the underlying IP (e.g. the digital art, image or video). In our experience, most NFTs only convey a *license* to the underlying IP. They do not convey actual legal ownership of the IP, even though the purchaser *does* own the NFT. For example, the terms and conditions incorporated in an NFT's metadata may state something akin to:

> *Subject to any specific terms and conditions provided by SELLER (if any), and subject to your continued compliance with these Terms and continued ownership of the Purchased NFT, we grant you a non-exclusive, non-transferable (except in connection with an ownership transfer of the NFT) license under SELLER's rights in the IP to use and display the IP associated with your Purchased NFTs, solely for your own personal, non-commercial use.*

Careful review of the terms and conditions associated with the NFT may be necessary, including involvement of qualified legal counsel, as we have observed some NFT terms and conditions that are unclear about whether the underlying IP remains the legal property of the seller after the NFT sale is complete. Whether IP is sold or licensed is a legal question – i.e. Topic 606 does not have an 'in-substance sale' notion (see section 10.2.10 of KPMG Handbook, Revenue recognition) – and it can significantly affect:

- **timing of revenue recognition** – if the IP is symbolic, an outright sale will be recognized on NFT transfer, while a license will be recognized over the license period (or term); and
- **accounting for any potential follow-on sales- or usage-based royalties** – sales- and usage-based royalties attributable to a license are not recognized before the triggering sales or usage occur, while royalties attributable to an IP sale follow the general product sale variable consideration guidance, which means they are recognized upfront to the extent they are estimable and not at risk of reversal in future periods when the actual amount becomes known.

License vs service

The licensing guidance in Topic 606 incorporates criteria from Subtopic 985-20 to distinguish between a software license and software-as-a-service (SaaS). [606-10-55-54(a), 985-20-15-5]

If the Subtopic 985-20 criteria are not met, a software license does not exist for accounting purposes and the licensing guidance does *not* apply; instead the entity accounts for a SaaS performance obligation. Although the guidance on distinguishing between a software license and SaaS explicitly refers to licenses of software, we believe other entities may find this guidance useful for deciding whether IP licenses exist in other IP hosting contexts (e.g. hosted media content). Question 10.2.30 and associated examples in KPMG Handbook, Revenue recognition, expand on this further.

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As identified above, while many NFT sales include a promise by the seller to host the underlying IP (or pay for its hosting on a distributed file network like Arweave) for a period of time, if the purchaser is contractually permitted to download the image, video or other IP onto its device(s) and it is feasible for them to do so, we believe a license exists for Topic 606 accounting purposes. Determining whether a license exists is important where the underlying IP is functional IP (see Functional or symbolic IP); this is because revenue attributable to a distinct functional IP license is recognized upfront when the license is transferred, while revenue attributable to a service performance obligation is generally recognized over the service period.

Determining whether a license exists in these scenarios is separate from any question about whether that license is distinct from the hosting service; this is discussed in the Step 2b: Identifying separate performance obligations section below.

Functional or symbolic IP

Topic 606 categorizes IP as either: [606-10-55-59, ASU 2016-10.BC56 – BC57]

- **Functional IP.** IP that has significant stand-alone functionality – e.g. the ability to process a transaction, perform a function or task, or be played or aired – like software and media content; or
- **Symbolic IP.** All IP that is not functional IP; examples include brand, team and trade names, logos and franchise rights.

The IP's categorization as functional or symbolic drives whether revenue allocated to a distinct license of that IP is recognized at a point in time or over time. Functional IP license revenue is recognized at the point in time (1) a copy of the licensed IP has been provided (or otherwise made available) to the customer and (2) the license term has commenced. By contrast, symbolic IP license revenue is recognized over the license period. [606-10-55-58A – 55-58C]

In the case of a perpetual symbolic IP license, we would usually expect license revenue to be recognized over the remaining economic life of the licensed IP. If the IP has an indefinite economic life (e.g. in the context of NFTs, one might envision a beloved children's character image *could* have such an economic life) additional judgment may be necessary. Question 10.9.20 in KPMG Handbook, Revenue recognition, discusses this further.

Step 2b: Identifying separate performance obligations

Promised goods or services are distinct, and therefore accounted for as separate performance obligations (i.e. separate revenue units of account), when both of the following criteria are met: [606-10-25-19, 25-21]

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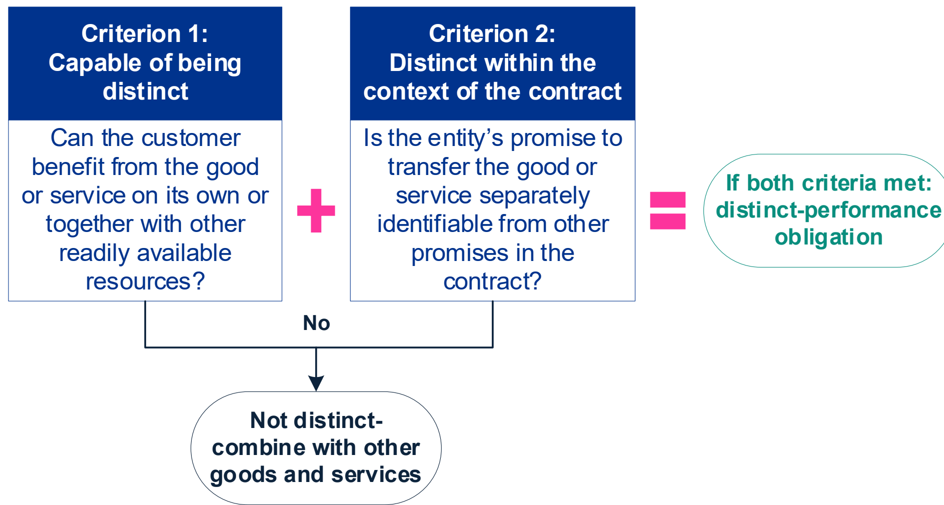

When a promised good or service is *not* distinct individually, it is either bundled with other nondistinct promised goods or services that collectively meet the distinct criteria, or combined with another distinct good or service (or distinct bundle of goods or services). Consequently, even if a promised good or service is distinct, it may not be a separate performance obligation if at least one or more other goods or services is (are) not distinct.

For example, if, in a contract with a customer, Product P is determined to be distinct, but Service S is not distinct and those are the only two promised goods and services in the contract, Product P and Service S are accounted for as a single performance obligation. [606-10-25-22]

In our experience, goods and services promised in an NFT sale transaction are frequently distinct from each other. For example:

- Consistent with most software hosting scenarios (see Question C300 in KPMG Handbook, Revenue for software and SaaS), we would generally expect the underlying IP (or a license thereto) to be distinct from any promise by the NFT seller to host that IP for a period of time.
- As discussed in KPMG Hot Topic, Evaluating custody of digital assets, we believe a digital asset wallet service will generally be distinct from other promised goods and services in a contract, while Topic 606 is explicit that a material right – i.e. to custodial services or any other good or service – is always a distinct performance obligation. [606-10-25-16B, 55-42]
- Most rights to specified or unspecified future events or additional licenses will be distinct from IP (or an IP license) transferred at the time of NFT sale. In our experience, the future events or additional IP rights *add* to those the purchaser obtains upfront rather than *transform* or significantly change or affect them. We believe the additive versus transformative relationship discussion in (1) Section 4.3.40 of KPMG Handbook, Revenue recognition, and (2) Question C320 of KPMG Handbook, Revenue for software and SaaS, pertaining to unspecified additional software product rights further explain the basis for this conclusion.

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- An article of designer clothing sold via the NFT and an associated service of storing that clothing for the NFT owner will typically be distinct from each other.

By contrast, NFTs are fast expanding into online video games. A license to a virtual game item may not be distinct from a promised hosting service if that item only has utility when playing the game online.

The above notwithstanding, determining whether promised goods and services are distinct from each other, especially in many IP licensing scenarios, can be complex and involve judgment based on the facts and circumstances. Chapter 4 of KPMG Handbook, Revenue recognition, and Chapter C of KPMG Handbook, Revenue for software and SaaS, provide in-depth guidance on determining whether promised goods and services are distinct from one another.

Concurrently delivered goods and services

In some NFT scenarios, it may not be necessary to separately account for distinct goods and services. This is because Topic 606 permits an entity to account for concurrently delivered goods and services as a single performance obligation – and therefore, avoid having to allocate transaction price to each of them – if they have the same pattern of transfer to the customer. [ASU 2014-09.BC116, ASU 2016-10.BC47]

For example, an NFT seller may grant the NFT purchaser a license to symbolic IP and promise them exclusive access to unspecified future NFT drops. While these two promises are likely distinct from each other, the NFT seller may be able to account for them as a single performance obligation if it concludes (1) the performance period for each of these is the same (e.g. the expected economic life of the licensed IP) and (2) they are both access-type performance obligations for which a time-based revenue recognition pattern is appropriate.

Step 3: Determine the transaction price

The following can create complexity when determining the 'transaction price' in an NFT sale transaction.

- First, the consideration for the NFT is usually in the form of noncash crypto assets (e.g. ETH (or WETH – i.e. 'wrapped' ETH), SOL or FLOW); and
- Second, the transaction price *may* include variable consideration, if the NFT's smart contract requires 'sell-on' or 'sell-through' royalties (i.e. a percentage of any subsequent resale price of the NFT) be paid to the current seller.

Noncash consideration

Noncash consideration is measured at its contract inception date fair value under Topic 606; therefore, NFT sales revenue earned in crypto assets should be measured based on the fair value at contract inception of the crypto assets to which the entity is entitled. [606-10-32-21]

While this is unlikely to cause significant difficulty when the entire NFT fee is paid at contract inception (i.e. to execute the smart contract), sell-on/sell-

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through royalties earned significantly after contract inception may create complexity. For example, an NFT seller may earn a 1 ETH sell-on royalty two years after it initially sold the NFT. Ignoring any immaterial non-GAAP accounting policy the seller may be able to employ, the seller needs to recognize the 1 ETH sell-on royalty at the contract inception date fair value of ETH, not the fair value of that 1 ETH two years later when it earns the royalty.

The difference between the ETH's fair value at (1) contract inception and (2) royalty recognition or receipt date does not affect the amount of revenue recognized. For example, if ETH had a fair value of $1,500 at contract inception and a fair value of $2,000 at the royalty earned (and received) date, the NFT seller should recognize revenue of only $1,500; the $500 difference does not affect recorded revenue. [606-10-32-21, 32-23]

Variable consideration

One compelling use case for NFTs is their smart contract-enabled ability to set sell-on royalties paid to the original content creator when the purchaser resells the NFT.

Variable consideration is ordinarily estimated at contract inception under Topic 606 and included in the total transaction price to the extent that a significant reversal of cumulative revenue is probable (i.e. likely) not to occur. The estimate is then revised as necessary at the end of each period until the amount becomes known. [606-10-32-5, 32-8 – 32-9, 32-11 – 32-14]

In the context of NFT sell-on royalties, however, either:

- the licensing royalties exception, which precludes recognition of sales- or usage-based royalties earned on licenses of IP before the sales or usage giving rise to the royalty occur, may apply because a license to IP is the predominant element of the NFT (i.e. versus an associated service or right); or [606-10-55-65 – 55-65B]
- any potential sell-on royalties may be constrained based on the factors outlined in Topic 606; for example: [606-10-32-12]
  - the amount of any such royalties is highly susceptible to outside factors, such as (1) whether the purchaser chooses to resell the NFT and (2) the market for the NFT if the purchaser chooses to do so; and
  - the NFT seller's experience with NFTs may still be limited or of little predictive value given the newness and volatility of the nascent NFT market.

Either of these circumstances would preclude the need for the NFT seller to estimate future royalties at the time of initial NFT sale. Sections 10.11 and 5.3.40 of KPMG Handbook, Revenue recognition, provide in-depth guidance on the license sales- and usage-based royalties exception and variable consideration constraint, respectively.

In addition, there may be other circumstances where either the (1) variable consideration allocation exception or (2) 'as-invoiced' practical expedient apply. In those cases, like in the two circumstances in the preceding paragraph, the

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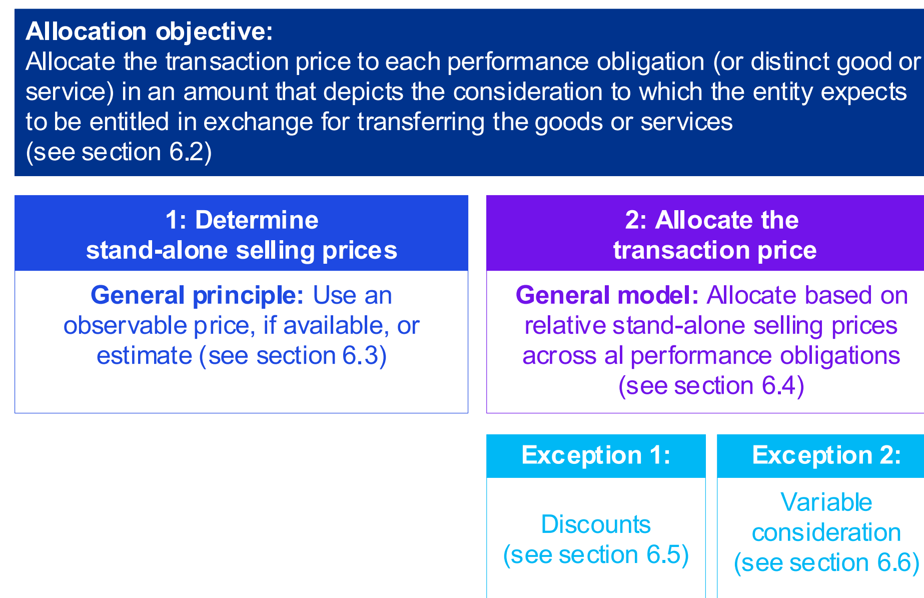
NFT seller would not need to estimate future royalties (see sections 6.6 – 6.7 and 7.4.50 of KPMG Handbook, Revenue recognition, respectively).

Step 4: Allocate the transaction price

Step 4 of the Topic 606 model requires an entity to allocate the transaction price (determined in Step 3) to each separate performance obligation (identified in Step 2) in a manner that depicts the amount of consideration to which an entity expects to be entitled in exchange for transferring the promised goods or services to the customer (the 'allocation objective'). [606-10-32-28]

The following chart summarizes this process. Chapter 6 of KPMG Handbook, Revenue recognition, outlines the requirements of Step 4 in detail.



In general, we do not believe NFTs raise unique issues around applying Step 4.

That said, we acknowledge that determining stand-alone selling prices (SSPs) for many NFT performance obligations could prove challenging. While determining SSPs is often a challenge (i.e. outside of NFT transactions), especially for license and related service performance obligations (e.g. software post-contract customer support, or PCS), some NFT goods and services may be especially new or unique (e.g. exclusive or early access rights to unspecified future NFT 'drops') such that (1) observable prices for them, or similar goods and services, are not available and (2) established practices for estimating the SSPs of those goods and services do not yet exist.

Step 5: Recognize revenue

An NFT seller recognizes revenue for a good or service contracted for via NFT in the same manner it would recognize revenue for that same good or service if it was contracted for in another manner (e.g. a paper contract). Chapters 7 and 10 of KPMG Handbook, Revenue recognition, address Step 5 of the Topic 606 revenue recognition model in general and with respect to licenses of IP, respectively.

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The preceding notwithstanding, the following reflect items where we have observed questions about applying Step 5 of the Topic 606 model to NFT sales.

- **Sold or licensed IP is generally not transferred with the NFT –** A copy of the IP sold or licensed via an NFT is generally *not* transferred together with the NFT (see What is your NFT?). However, under Topic 606, if the metadata provides the necessary information to obtain a copy of the IP (e.g. the web or IPFS address) and that IP is available for immediate download when the NFT is transferred, we believe that is no different from the NFT seller physically or electronically delivering a copy of that IP (e.g. the video clip, art or character image) to the purchaser.
- **Period of time over which virtual goods revenue is recognized –** The transferability of an NFT may affect the revenue recognition period for certain virtual goods sold via NFT for use in an online, hosted gaming environment. In particular, outside of NFT scenarios, gaming entities frequently recognize revenue for virtual goods over an average player life. When a virtual good is sold via an NFT, it is generally transferable from one player to another; this gaming transferability is an important and growing use case for NFTs. When this is the case, it may not be appropriate for an entity to recognize revenue over only a single estimated player life. Instead, it may be more appropriate to recognize virtual good revenue over an estimated economic life of the virtual good.
- **Rights to NFT goods or services in a resale –** As outlined in the Is the promise to provide the good or service or to transfer a right to that good or service? section, a reseller's performance obligation in an NFT resale is generally to transfer its *rights* to goods and services embedded in the NFT to the resale purchaser. Regardless of whether an underlying good or service would be transferred over time (e.g. a symbolic IP license or a service), we believe the reseller generally transfers its *right* to that good or service at the point in time it transfers the NFT to the resale purchaser.

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3. NFT purchasers

Accounting for obtained rights

To properly account for the purchase of an NFT, the purchaser must identify the rights it obtains therefrom. Then, it should generally account for those rights – both at and after it acquires them – in the same manner as if it acquired them differently (i.e. not through an NFT). Said differently, the purchaser did not acquire an NFT; instead, it acquired the rights conveyed by that NFT. Therefore, it accounts for those rights just as it would if it had obtained them through a conventional contract or transaction (that is not a business combination).

This perspective of the NFT merely conveying other identifiable rights (instead of being an asset in its own right) differs from the perspective of crypto intangible assets like BTC or ETH or crypto financial assets (such as some stablecoins) that the applicable token is, itself, an asset.

Below is a summary table of how we believe an NFT purchaser would typically account for different types of rights obtained through an NFT purchase.

Nature of right obtained	Accounting treatment (and guidance)
Ownership of IP	Intangible asset (Topic 350)
License of IP	Intangible asset (Subtopic 350-40 if software; Subtopic 350-30 otherwise)
Virtual goods (including virtual real estate) in a virtual land (metaverse)	In general, we believe this would be accounted for as a software license (Subtopic 350-40)
Rights to unspecified future events or NFTs	Prepaid expense (Topic 340)
Hosting services	Prepaid expense (Topic 340)
NFT custodial services	Prepaid expense (Topic 340)
Ownership of physical, tangible goods (e.g. collectibles or designer clothing items)	Inventory (Topic 330) or PP&E (Topic 360)
Storage services (e.g. of physical goods)	Prepaid expense (Topic 340)

If multiple rights are obtained through the NFT purchase, the purchaser would generally allocate the consideration paid to the various rights on the basis of their relative fair values. Fair value is determined under Topic 820.

However, if the NFT conveys ownership of (or a license to) internal-use software, we believe Subtopic 350-40 *requires* entities to allocate the consideration paid on a relative 'stand-alone price' basis. The stand-alone price of an element is 'the price at which a customer would purchase that component separately'. [350-40 Glossary, 350-40-30-4]

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NFTs purchased with crypto intangible assets

NFTs are often purchased with crypto intangible assets (e.g. ETH or SOL) instead of cash. In that case, the transaction is accounted for by the NFT purchaser as the sale of the crypto intangible asset(s) in return for the noncash NFT goods and/or services. Topic 606 applies if selling crypto intangible assets is an ordinary activity for the NFT purchaser; otherwise, Subtopic 610-20 generally applies.

Under either Topic 606 or Subtopic 610-20, the NFT purchaser will record the rights and obligations it obtains with the NFT at their fair value. If a reasonable estimate of fair value cannot be made, it will record the NFT rights and obligations by reference to the SSP(s) of the crypto intangible asset(s) transferred. [606-10-32-21 – 32-22]

Any difference between the amount recorded for the NFT rights and obligations and the carrying amount of the crypto intangible assets transferred will result in income or loss at the time of purchase with gross (revenue and cost of goods sold) effect if under Topic 606 and net (gain or loss) effect if under Subtopic 610-20.

Purchaser-paid minting costs

As outlined in the earlier discussion of Lazy minting, the NFT purchaser may be required to pay for the costs of minting the NFT. We believe those costs are no different from any other direct transaction costs incurred to acquire an asset. An acquirer generally includes direct acquisition-related costs in the cost-basis initial measurement of an acquired asset.

Section 3.2 of KPMG Handbook, Asset acquisitions, further discusses the accounting for asset acquisition transaction costs.

Sell-on royalties

As discussed elsewhere in this publication, a party other than the NFT purchaser may be entitled to a portion of any resale consideration; this may, for example, be the original NFT seller or the creator of underlying licensed IP (if a different party from the original NFT seller).

Consistent with Question 3.5.10 in KPMG Handbook, Asset acquisitions, we believe contingent consideration in the form of a sales-based royalty that is not in the scope of Topic 815 (derivatives and hedging) and where each sale incurs an additional payment is generally recognized as a period cost when incurred. Because an NFT sell-on royalty is incurred only on reselling the NFT (and derecognizing any assets – e.g. an IP license – recognized thereunder), we believe a sell-on royalty would generally never be included in the cost basis of any assets recognized from the NFT purchase. It would be recognized as a cost of the period in which the resale occurred.

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Resale

The NFT sellers section addresses the accounting for NFT sales by all sellers, including resellers.

Derecognition

NFTs are, in effect, 'bearer instruments'. That is, the prior holder's rights associated with the NFT (e.g. a license to IP or the right to access exclusive events or online communities) generally terminate (or expire) on transfer of ownership of the NFT to another individual or entity.

Consequently, when an NFT owner sells an NFT, it derecognizes any assets (e.g. intangible or prepaid assets) it has recorded associated with the NFT.

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4. NFT marketplaces

NFT marketplaces have emerged in recent years that provide entities and individuals with an online platform to market and sell their NFTs. These marketplaces principally earn revenue by taking a percentage commission of each NFT sale.

Some marketplaces also provide generally non-custodial wallet services for marketplace users. We address accounting considerations for NFT custodians and other wallet service providers, whether a marketplace or another type of entity, in the NFT custodians section.

In our view, the key accounting question for NFT marketplaces is whether they are a principal or an agent for sales on their platform. Applying the principal-agent guidance in Topic 606 requires judgment, often significant, and consideration of all relevant facts and circumstances. Chapter 9 of KPMG Handbook, Revenue recognition, provides in-depth guidance on applying the principal versus agent considerations in Topic 606.

In general, we do not believe the principal versus agent considerations for NFT marketplaces are uniquely different or more complex than for other online or digital selling platforms (e.g. digital advertising platforms or software marketplaces). However, marketplace entities should be careful to properly identify the 'specified good(s) and/or service(s)'. The unit of account for the principal-agent analysis is *each* specified good or service. [606-10-55-36 – 55-36A]

As outlined in Is the promise to provide the good or service or to transfer a right to that good or service?, the NFT is not *itself* a 'specified good or service'. Instead, the specified good(s) or service(s) to be assessed under the principal-agent guidance are the underlying separate performance obligations (e.g. a distinct IP license or distinct custodial, storage or hosting service) – see Step 2b: Identifying separate performance obligations. If the marketplace entity controls the specified good or service or a *right* to a specified good or service to be provided by another party (e.g. the NFT issuer) before that good, service or right embedded in the NFT transfers to the NFT purchaser, the marketplace is a principal for that specified item. [606-10-55-37 – 55-37A]

Because under Topic 606 an entity assesses whether it is a principal or an agent for each specified good or service in a contract, and an NFT sale transaction may include *multiple* specified goods or services, it is possible an NFT marketplace could find itself a principal for one specified good or service and an agent for another. [606-10-55-36 – 55-36A]

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5. NFT custodians

When an NFT custodian is involved, holding a depositor's NFT, we believe the question arises about whether the depositor or the custodian is the *accounting* owner of the NFT, like that asked when a custodian holds another entity's BTC or ETH.

However, as discussed throughout this publication, an NFT is fundamentally a blockchain memorialization of *underlying* rights and obligations, such that we believe the relevant accounting question in an NFT custodial scenario is whether the depositor has the present right to the economic benefits that can be derived from the NFT and 'controls' (i.e. can direct their use and obtain substantially all of) those benefits.

Complicating that question, however, is the fact that, in general, NFTs are digital 'bearer instruments'; the rights and obligations associated with the NFT accrue to the individual or entity that can prove ownership of the NFT. And with blockchains, digital asset ownership (including of NFTs) is, in general, recognized by wallet address; that is, from a blockchain perspective, the blockchain recognizes the owner of the NFT as the owner of the digital wallet to which the NFT was last transferred.

In a custodial (versus non-custodial) wallet scenario, the wallet address recognized as the NFT owner by the blockchain may belong to the custodian instead of the custodial customer, especially if the custodian stores depositors' digital assets in omnibus wallets (i.e. wallets in which depositors' digital assets are commingled with those of other depositors).

Therefore, the terms and conditions of the custodial agreement may be determinative to the *accounting* owner evaluation. For example, while the blockchain might recognize the custodian's digital wallet address as the owner of the NFT, the custodial agreement may (1) grant the depositor the right to withdraw the NFT at any time and (2) prohibit the custodian from withdrawing, selling, transferring, loaning, pledging or otherwise encumbering it. In that case, we believe the depositor, rather than the custodian, has the present right to the economic benefits that can be derived from the NFT and 'controls' (i.e. can direct their use and obtain substantially all of) those benefits. The depositor, therefore, is the accounting owner of the NFT. [606-10-25-25, CON 8.E17, AICPA Digital Asset Guide Q10]

KPMG Hot Topic, Evaluating custody of digital assets, provides additional considerations around accounting ownership of custodied digital assets that may be relevant to assessing the accounting owner of a custodied NFT.

Depositor is accounting owner

If the accounting owner of the NFT is determined to be the depositor, the depositor accounts for (1) the underlying rights and obligations conveyed by the NFT just as it would if no custodian were involved (see NFT purchasers section) and (2) the custodial service it receives in the same manner as any other service.

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Meanwhile, the custodian is a custodial service provider. It will not recognize the underlying rights and obligations conveyed by the NFT as its own. However, it may be required under SEC Staff Accounting Bulletin (SAB) No. 121 (SAB 121) to recognize: [SAB 121.Q1]

- a liability for its obligation to safeguard the NFT (hereafter, 'safeguarding obligation liability'); and
- a corresponding 'safeguarding asset'.

The safeguarding obligation liability is measured initially and subsequently at the Topic 820 fair value of the NFT(s) held in custody. The safeguarding asset is measured in the same manner, except that its carrying amount should reflect any actual or potential safeguarding loss events, such as resulting from fraud or theft (including hacks). [SAB 121.Q1, n9]

SAB 121 applies to entities, reporting under US GAAP or IFRS that are subject to SEC interpretations thereof, that hold NFTs for others. NFT custodians should carefully consider its provisions. KPMG Hot Topic, SAB 121: Questions & Answers, provides guidance on the scope, applicability, application and disclosure requirements of SAB 121.

If an NFT custodian is required to record a SAB 121 safeguarding asset and liability, a practical challenge may arise in measuring the fair value of the safeguarded NFT. For some NFTs, there may be relevant market observable prices to at least assist in estimating their fair value. For example, if NFT X is part of a 'collection', recent sales of other NFTs that are part of that same collection may provide relevant information to consider when estimating the fair value of NFT X. For other NFTs, there may not be market observable information. In those cases, a different approach will be required. Valuing NFTs is a new concept; therefore, assistance from a qualified valuation specialist may be necessary. KPMG Handbook, Fair value measurement, discusses fair value measurement under US GAAP and IFRS.

Custodian is accounting owner

We have not observed this scenario to date but believe the custodian's and depositor's accounting may depend on the facts and circumstances, including the specific terms of the custodial agreement and the nature of the rights and obligations that underlie the custodied NFT.

We advise entities that believe themselves to be in this situation to consult with their auditors or other accounting advisors about their specific facts and circumstances.

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Additional resources

See KPMG Financial Reporting View page, Cryptocurrencies and other digital assets, for all of our existing guidance on accounting for crypto and other digital assets. Resources include (not exhaustive):

- KPMG Executive Summary, Accounting for crypto assets – entities that are not broker-dealers or investment companies, provides an overview of the accounting for crypto intangible assets by commercial entities.
- KPMG Executive Summary, Accounting for crypto assets – investment companies, provides an overview of the accounting for crypto intangible assets by investment companies.
- KPMG digital assets Hot Topics, which delve into the latest hot button issues around the accounting for crypto and other digital assets

See KPMG Handbooks, Revenue recognition, and Revenue for software and SaaS, for in-depth guidance on applying Topic 606 and Subtopic 610-20, including scoping considerations.

See KPMG Handbook, Software and website costs, for in-depth guidance on accounting for software and website development costs under Subtopics 350-40, 350-50 and 985-20.

See KPMG Handbook, Asset acquisitions, for guidance on acquiring assets not part of a business combination.

See KPMG Handbook, Fair value measurement, for guidance on determining fair value under US GAAP and IFRS.

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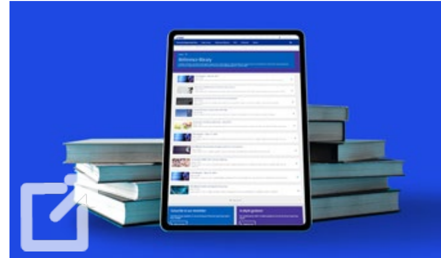

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US GAAP Handbooks

As part of Financial Reporting View, our library of in-depth guidance can be accessed here, including the following Handbooks.

- Accounting changes and error corrections
- Asset acquisitions
- Bankruptcies
- Business combinations
- Climate risk in the financial statements
- Consolidation
- Credit impairment
- Debt and equity financing
- Derivatives and hedging
- Discontinued operations and held-for-sale disposal groups
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- Employee benefits
- Equity method of accounting
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- Income taxes
- Investments
- Leases
- Leases: Real estate lessors
- Long-duration contracts
- Reference rate reform
- Research and development
- Revenue recognition
- Revenue: Real estate
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- Segment reporting
- Service concession arrangements
- Share-based payment
- Statement of cash flows
- Transfers and servicing of financial assets

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