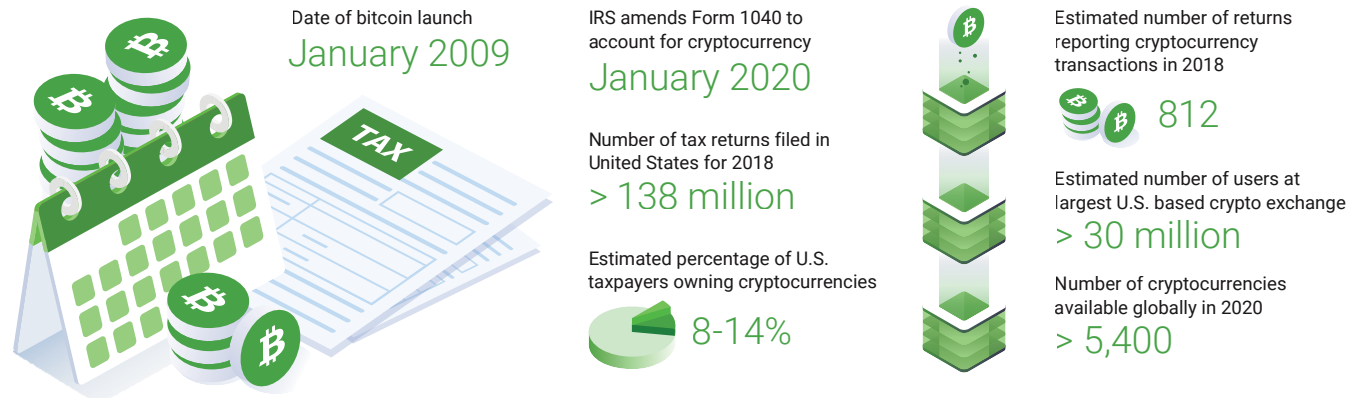


Navigating the world of crypto asset tax reporting



Meeting the crypto moment

As crypto assets rise in popularity, CPAs must be prepared to serve as trusted advisors for clients



Data as of March 2020

[Download the full infographic here.](#)

Crypto assets – assets created to act as a means of exchange that use cryptography and have transactions recorded on blockchains – have grown in popularity in recent years, with no signs of slowing down. Along the way, material marketplaces have been created to facilitate the exchange of these assets, world-wide and with little regulation and oversight. Viewed by many as a fringe interest only a few years ago, they have spawned an entire ecosystem – active communities of observers, investors, dedicated exchanges, derivatives, online media, new technology services, and more.

Just how quickly has the adoption of crypto assets grown? Consider that bitcoin, the first and most well-known cryptocurrency, was launched in 2009. Today, an estimated 8-14% of the US population owns crypto assets, there are hundreds of dedicated exchanges (a number that is growing weekly) and hundreds more funds – all investing in thousands of crypto assets. This is happening across borders, all over the world.

The rapid, continuing rise of crypto assets holds significant implications for CPA firms of all sizes. Many tax clients are unaware of new responsibilities for reporting and paying taxes on crypto asset transactions, and even among those who are aware, there is often considerable confusion regarding how to do so accurately. In this environment, CPAs have a responsibility to make sure their clients are aware of the reporting requirement, as well as to help them comply with IRS guidelines by accurately tracking, reporting, and paying taxes on their transactions. Fulfilling this duty to clients will require firms to cultivate some new capabilities – and crypto asset tax technology can play a large role in this effort.

In this paper, we will illuminate the new crypto landscape in which clients and firms alike are operating, highlight the role that accountants play in this environment, and illustrate ways in which tax compliance software can address the unique challenges introduced by managing all of this new data.

The IRS responds: New guidelines

Crypto assets (or virtual currencies, as the IRS refers to them) are here to stay, so it comes as no surprise that the IRS has taken note of this new revenue opportunity. They have implemented new guidelines that ensure these assets are tracked and taxed just like their more traditional counterparts – and their interest is evolving at a rapid clip, judging by a series of escalations in the information they are requesting and where they are requesting it. In 2019, for the first time in a serious way, the IRS emphasized that owners of crypto assets (crypto) are expected to calculate and report crypto gains and losses on their 1040 returns. This was clearly indicated by the question that appeared at the top of Schedule 1 of the 1040: “At any time during 2019 did you receive, sell, send, exchange, or otherwise acquire any financial interest in virtual currency?”

Then, in August 2020, the IRS announced that it would be moving this question from Schedule 1 directly to page 1 of Form 1040, starting within the 2020 tax year. That would mean that even for those who don't file a Schedule 1, they can no longer avoid answering the virtual currency question. Everyone who files a personal tax return for the 2020 tax year will have to answer. The steadily increasing prominence of this question signals that crypto assets are a rising priority for the IRS.

From Schedule 1 in 2019 to Form 1040 in 2020

Including a new crypto-focused question to the Form 1040 was only the start. Throughout 2019, the IRS conducted an awareness campaign on the topic, in part by sending out more than 10,000 letters to crypto owners to make them aware of the changes – and in the process, letting them know the IRS is aware that recipients own or owned crypto assets. The letters indicated that taxpayers are not only responsible for filing 2019 taxes, but are also required to pay back taxes through amended returns.

To comply with these new guidelines, crypto owners must accurately calculate their gains and losses on all crypto transactions throughout the year. But unlike their experiences conducting transactions in traditional markets, many crypto owners do not receive a 1099 form from their brokers or exchanges at the end of the year. As a result, many owners of crypto assets face serious challenges in properly calculating their taxable income – and are looking for advice, guidance, and tools that can help their reporting efforts.

Crypto terminology at a glance

The language of crypto asset can be complex. Learn these common terms to enhance your understanding of crypto and how it works.

Blockchain: The word blockchain describes how the data is stored and linked. A batch of transactions is stored within each "block", each block is linked to the batch of transactions following and preceding it. The blocks are immutable due to the use of cryptography. This creates a "trusted" ledger of transaction information.

Node: In a distributed and decentralized blockchain, the ledger is maintained across several computers that are linked together in a peer-to-peer network redundantly. Each replicated version of a ledger is called a "node". The nodes are all verifying that all updates are consistent before a new block is recorded.

Digital asset: The binary representation of anything which has economic value and can be owned.

Crypto asset: Any digital asset that utilizes cryptography to secure transaction records on a ledger, such as on a blockchain, to control the creation of additional like assets, and to verify the transfer of asset ownership.

Cryptocurrency: One type of crypto asset, which may be used as an electronic form of money. Cryptocurrencies are built on and transferred on blockchains.

Stablecoin: A cryptocurrency that is designed to create greater asset value stability and prevent volatility. A stablecoin can be pegged to fiat money, exchange-traded commodities (such as precious metals), or even "baskets" of assets that are held in equal quantity to the quantity of stablecoins.

Virtual currency: The term created by the European Central Bank in 2012, to describe all cryptocurrencies. Since, the definition has expanded to include use by the IRS to describe all crypto assets.

Cryptocurrency Wallet: Software that interacts with the blockchain and enables the secure storage of cryptocurrencies. One can store, send, and receive, cryptocurrencies via a wallet.

Initial Coin Offering (ICO): Equivalent to an initial public offering (IPO) for the creation of new crypto assets. Cryptocurrencies and other crypto asset protocols raise money from investors in exchange for early ownership of the crypto asset.

Crypto Exchange: A venue which facilitates buying, selling, trading, and/or storage of crypto assets. Crypto exchanges often fulfill the role of a traditional securities exchange as well as a broker/dealer and/or a custodian by holding customer accounts and providing account related services. Crypto exchanges can choose to list any crypto assets and currently no centralized processes exist to standardize the names or ticker symbols of crypto assets that are listed on the various crypto exchanges around the world.

Hard fork: A change in a blockchain's code (protocol), which is significant enough to change the nature of a crypto asset, which the network participants do not agree to in majority. The result is two (or more) crypto assets which are treated as unlike assets and differ in value after the hard fork has occurred.

Soft fork: A change in a blockchain's code (protocol), which is NOT significant enough to change the nature of a crypto asset, which the network participants do not agree to in majority. The result is a possible change to the cryptocurrency and its protocols without a new asset being created.

Airdrop: The distribution of a crypto asset to all 'current' holders of a specific crypto asset, which is proportional to the holders' current ownership position. Airdrops present unique tax compliance.

Mining: The act of verifying transactions on a "proof-of-work" blockchain through computational power and therefore the use of hardware and electricity. Typically, participating in mining results in the award of a small amount of the crypto asset to the miner, such as in bitcoin mining.

Staking: The act of verifying transactions on a "proof-of-stake" blockchain. Staking also results in a reward, but in contrast to mining, it is in return for "staking" a quantity of the crypto asset instead of for computational power.

Crypto asset reporting: The challenges

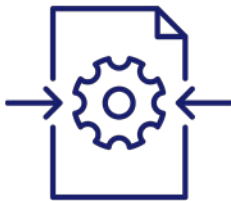
Crypto assets introduce a number of challenges inherent to the unique, decentralized ecosystem in which they operate. Understanding these challenges is a critical first step in addressing the complexity of reporting for crypto owners and the firms that serve them.



Lack of 1099 forms

As mentioned earlier, those accustomed to receiving detailed transactional information on stock and bond holdings each year in order to calculate taxable gains and losses are often surprised to find that crypto asset reporting presents another departure from traditional norms. Most crypto transactions take place on crypto asset exchanges, many of which believe they have no legal obligation to provide 1099 reporting for these transactions. Many observers believe there is some merit to this position, based on guidance that has been issued to date. Plus, whether 1099 reporting is even practical or logical is the subject of debate, considering the technical hurdles to accurate and/or meaningful reporting.

Form 1099s are critical in helping tax professionals and crypto investors prepare income tax returns. In the absence of traditional reporting from crypto asset exchanges, accurate, complete recordkeeping on transactions becomes even more complex – and more important. If traditional Form 1099s are not available or are simply not the right solution in a given situation, their intent still needs to be met. Experts in this field are reassessing the intent behind traditional forms (such as the 1099) to determine whether and how it can be delivered in new ways.



Minimal transactional data tracking and institutional recordkeeping

Due to the lack of standards in the crypto ecosystem, reporting on crypto trading introduces a range of inconsistent data formats. There are thousands of unique types of crypto assets traded on hundreds of exchanges around the world. As a result, performing manual calculations, establishing cost basis, and assigning fair market value (FMV) is more challenging with crypto asset data than in other aspects of tax preparation.

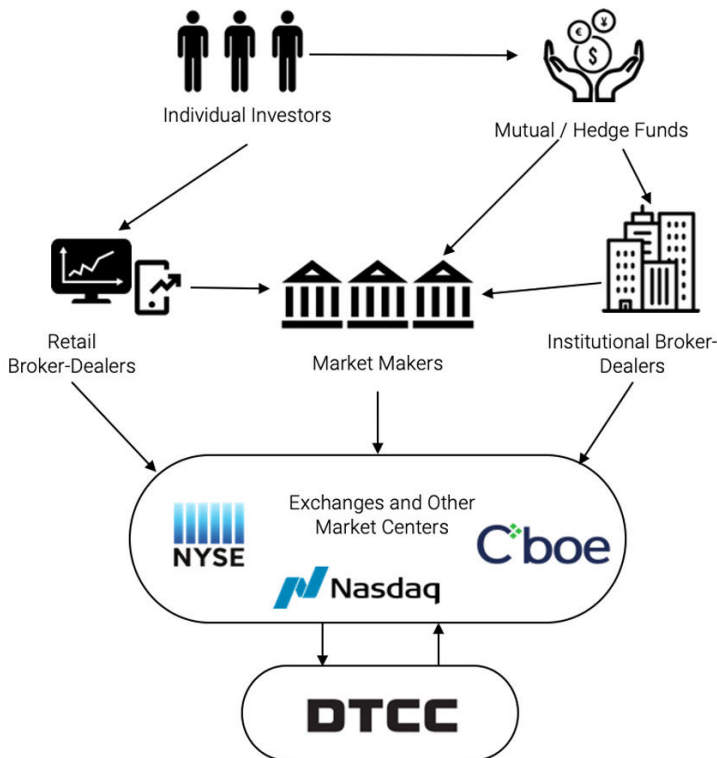
Additionally, with crypto assets the burden of recordkeeping rests with the owners of the assets, not with the exchange or with any other organization. Without keeping track of their transactions, exchanges, initial coin offerings (ICOs), and other important details, it can be challenging for clients and accountants to trace and properly account for them. A complete history of crypto transactions is required to properly calculate tax basis and net gain/loss on an asset sold.



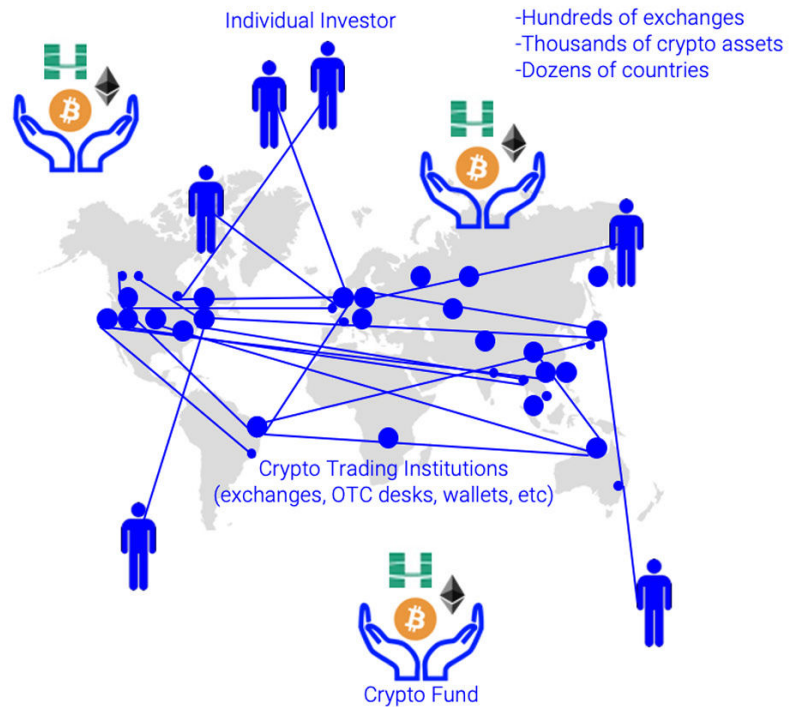
Data challenges

Crypto assets are traded across hundreds of independent exchanges around the world, many of which use their own individual data formats and tickers. For example, different exchanges may use different ticker symbols to refer to the same assets (the Coinbase and Kraken exchanges, for example, use BTC and XBT respectively as bitcoin’s ticker) with many of these assets going out 10 to 20 decimal places. This makes reconciling quite difficult, as legacy tools and processes assume the precision of only two decimal places. Adding to the complexity, crypto-to-crypto transactions are not assigned a value in US dollars, and fees are often charged in a third crypto asset – all of which adds new complexity to deriving cost basis, proceeds, and matching tax lots.

Traditional markets: Centralized and organized



Crypto markets: Decentralized and diffused



As a result of this decentralized ecosystem, data is equally decentralized, making it difficult to collect, standardize, and reconcile. Not only is data scattered across many different exchanges, data quality is inconsistent and often incomplete. Key activities such as manual calculations, establishing cost basis, and assigning FMV are more difficult than with other transactions, requiring tax preparers to track down relevant information from each exchange, in whatever format the data is provided. Finally, tax preparers must also be mindful of fees – the accounting of fees can impact the overall calculation of gains and losses, resulting in discrepancies in accounting for tax liability and affecting reporting accuracy.

CPAs play a critical role



Most clients do not take the time to stay abreast of new guidelines and changes to tax laws – they expect their CPA firm to do this work as part of their engagement. As a result, clients provide their firms with the same tax data year after year, unless they are told that additional tax information is needed. If clients didn't provide crypto transaction reporting information last year, why would CPA firms expect them to provide anything different this year?

In their role as trusted advisors to their clients, CPA firms have a growing responsibility to inform and educate clients on the need to report crypto assets, as well as to ultimately make sure their returns are completed thoroughly and accurately. Firms that are uninformed or uneducated themselves about crypto compliance guidelines could leave their clients at risk for audits, fines, and penalties – and could leave the firm open to criticism from clients who feel that their constantly evolving needs are not being met.

Sharpen Your Crypto Tax Skill Set

As you begin your journey into the world of crypto assets, leverage these educational resources to learn more about the crypto ecosystem and IRS guidelines on crypto tax reporting so that you can advise and support your clients with confidence.

- **AICPA Self-Study Webcast: [Blockchain and Virtual Implications For Tax](#)** (10 CPE): Learn how to advise clients that may be involved in transactions involving Blockchain/DLT. **Receive a 20% discount, be sure to use code CRYPTO20.**
- **AICPA Self-Study Webcast: [IRS Guidance on Taxation for Virtual Currency](#)** (1.5 CPE): Explore the IRS's new guidance on taxation of virtual currency in detail, get the answers to frequently asked questions, and find out what you need to know as a tax practitioner or personal financial planner.
- **AICPA Practice Aid: [Accounting for and Auditing of Digital Assets](#)**
- **CPA.com's [Lukka Library](#)**: Free access to valuable content on the crypto ecosystem from a technology leader in crypto accounting. Covers topics such as tax reporting, forks & air drops, mining & staking, and more.
- **Revenue Ruling [2019-24](#)**
- **FAQs on IRS [Website](#)**

Having the right technology is key

Is the data generated by crypto assets really that much more complex than data associated with more traditional assets? In short, yes. This is the result of the rapid growth of an entirely new ecosystem operating largely outside of the constraints of oversight and standards, spawning a host of products designed to chase demand – from individual traders, funds, investors and more. As this cottage industry exploded in growth, many of its pioneers focused more on new innovations and profits than on back-office functions. While it's tempting to view technology as the disruptive force behind crypto-related confusion and complexity, given the relative ease with which new assets and exchanges are launched, there is a stronger argument that technology is the key to managing the complexity of crypto assets. Today, many technology providers are stepping up to meet the demands of compliance reporting by simplifying the unknown. From calculators to platforms, CPAs have many solutions to choose from – so many, in fact, that it can be difficult to determine which deliver the right mix of capabilities for their clients and firms.

These solutions vary considerably in both the quality and capabilities they deliver. What matters most to CPAs? While not an exhaustive list, the following considerations are among the most important for CPAs assessing and selecting crypto-focused technologies.

Exchange Support for Consumer Tax Reporting

As mentioned previously, most crypto exchanges do not supply standard 1099 tax forms for their customers, and the issue of exactly what information should be required is a hotly debated topic. Regardless, U.S. tax filers must pay taxes on their crypto income, including prior tax years, with or without these forms. With the support of technology, CPAs can report clients' crypto gains & losses without the summarized transactional information found on these standard tax forms.

Upon uploading clients' yearly transactional data, the right technology solution can reconcile, analyze & calculate the data by standardizing formats, fields, tickers, and assigning cost basis. Not only does this simplify the process of analyzing batch transactions, but it also saves the firm time generating the tax outcome. Once completed, the CPA will have access and visibility to the applicable reporting (Form 8949) based on whichever accounting method was selected (FIFO, LIFO or HIFO), allowing the firm to accurately report crypto tax on the client's annual return. From a process standpoint, what was once likely a manual, time consuming, exhaustive process, is now simplified – with a tax outcome produced in a matter of minutes, and in some cases seamlessly and immediately integrated into the tax accounting software.



MANAGE

Easily onboard your professionals and enable them to manage their clients



COLLECT

Guided transaction data collection with native exchange file mappings and manual entry interfaces



ENRICH

Standardize and normalize data formats, fields, and tickers for easy cost basis assignment



REVIEW

View all data uniformly in an interface to confirm taxable events such as income and capital gains



REPORT

Generate and download detailed tax lot and roll-forward reports by asset in FIFO, LIFO, or Optimized



Standardizing raw exchange data – across many exchanges

There are more than 200 crypto exchanges operating today, and none are subject to standards for data quality and consistency. This lack of standards, combined with inherently complex data, frequently leads to incorrect results for tax filers. Technology that is able to standardize this data, in the hands of tax and accounting professionals, can be instrumental in increasing the ease and accuracy of this process.

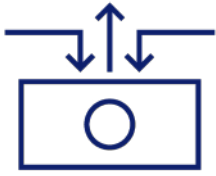
When considering the needs of clients who own crypto assets, it is useful to understand how different exchanges function within the full ecosystem. Some exchanges function primarily as “on-ramps” for users – they easily allow users to purchase crypto assets with traditional currencies (such as U.S. dollars). Bitcoin, Ether, Litecoin, and Ripple are in this category.

There are also exchanges that allow the exchange of crypto assets only with other crypto assets. Users buy a crypto asset on Exchange A, transfer it to Exchange B, conduct trades across hundreds of assets in search of the largest gains... and then follow the reverse order when they decide they want to “cash out” with a traditional currency. In this basic scenario, the complexity of managing data begins to come into focus. Each exchange along the way chooses whichever symbols they prefer to represent assets.

For example, bitcoin is the most-traded cryptocurrency in the world. Meanwhile, Coinbase and Kraken are the two largest U.S.-based crypto exchanges. Coinbase refers to bitcoin as “BTC,” while Kraken refers to it as “XBT.” This same dynamic plays out for thousands of assets across hundreds of exchanges. Older software solutions are simply not able to manage this level of complexity.

Crypto-focused tax software must be able to manage unique, constantly changing crypto data across exchanges, accounting for variances in ticker symbols, naming conventions, and even decimal precision (e.g. some crypto assets require precision to the 50th decimal point). The cost of inaccuracy can be significant – mistakes can lead to inaccurate taxable income calculations and can raise the risk of non-compliance in the event of an audit. This problem can be solved by enriching raw crypto asset transaction data with other data sets, such as reference data which maintains a listing of all the assets and symbols used across various exchanges. The result? End users are able to see bitcoin as only one symbol across exchanges, even when the exchanges themselves each use their own symbols for bitcoin.

Tax professionals should look for software that incorporates reference data into the solution in order to reduce complexity. Tools that are able to draw on accurate reference data and normalize the symbols across assets can allow tax professionals to focus on tax-technical aspects of crypto taxes – rather than the technical complexities of crypto assets, markets and exchanges themselves.



Treatment of fees and FMV

In most scenarios, fees are simple and straightforward: Trade fees on a purchase are capitalized and increase cost basis, while trade fees on a sale reduce gross proceeds. Withdrawal and deposit fees can be expensed.

But when trade fees are categorized as capital assets, new complexity enters the equation: Post-trade pricing data is required in order to determine FMV. When FMV is required to value crypto assets, it opens the door to many questions and issues regarding how best to value assets. Plus, in the crypto ecosystem, deposits and withdrawals are transactions that often occur among third parties. Individuals are still required to identify when this occurs in order to accurately calculate their income before reports can be generated. And when fees are incorrectly factored into reporting, income – and, by extension, taxes – can be materially incorrect.

The first step to avoiding this problem is understanding the circumstances in which transactions took place. Next, CPAs need the right tools to sort through and categorize transactions correctly, based on information provided by the client. But many tools on the market today incorrectly account for fees – or simply ignore this layer of complexity altogether. Accurate, relevant post-trade pricing data should be used at every turn. For example, for tax compliance and accounting it is important to rely on exchange prices as executed rather than averages, indices, and volume-weighted average prices (VWAPs). Tax professionals should advise their clients that the effort to redo calculations in solutions that apply FMV reasonably will not only reduce the risk of tax non-compliance, but can directly save them money.

In this context, another important technology consideration not to be overlooked is the Service and Organization Controls (SOC) examination of controls employed by software tool providers. While SOC 2 reports (using standards that are overseen by the AICPA) do not directly assess the functionality of a software tool, by testing the effectiveness of controls in place in the system used to develop the tool, they can provide a window into the quality of the tool. Positive SOC 2 reports can be an important input in software purchasing decisions, since solution providers that have gone through the significant effort required to obtain these reports are typically mature, risk-conscious organizations committed to providing reliable, trustworthy solutions.



Standardize assets across categories

As with more traditional assets such as stocks, bonds, and cash, digital assets have their own categories – reserves, currencies, appcoins, security tokens, and more. This introduces yet another layer of complexity to crypto accounting – one that the right technology tools can handle relatively easily, allowing tax professionals to standardize assets across categories in order to correctly reconcile transaction data. Assuming that reference data is already applied, this added complexity can be addressed with software that helps define frequently-encountered scenarios. Education is equally important, because reconciliation techniques can be applied in different ways – informed professionals can make the right decisions based on the specific context of individual clients.

The CPA's crypto responsibility



The crypto asset ecosystem has surged, becoming a \$200 billion industry – and it is rapidly maturing as it grows. What once was considered the “wild west” of finance is gaining order, structure – and regulatory oversight. But even as more traditional, established players enter the crypto field, and government agencies and tax authorities become more involved, the underlying conditions that have made crypto such a bewildering, confusing landscape for tax preparers will not change overnight. For now, new crypto exchanges continue to appear. Different currencies adhere to different standards, often self-imposed. And while tax authorities ramp up enforcement, exchanges continue to operate with relatively little oversight, especially when compared with more traditional financial institutions and infrastructures.

As interest in the trading of crypto assets continues to grow, clients must be mindful to the tax implications in this new ecosystem. Often, clients fail to realize that they must comply, while others are overwhelmed and confused, and still others think they can “hide” in the shadows of the crypto ecosystem without being detected by tax authorities and other regulators. In all these cases, there is a need for advisors to help these clients navigate this new ecosystem.

This moment presents an uncommonly clear opportunity for CPAs – and the profession at large – to demonstrate the value of leadership and insight. Because technology is central to the development and widespread adoption of crypto assets, it is tempting to assume that technology alone is sufficient to manage the tax and regulatory implications of owning these assets. Technology is certainly central to any serious crypto asset tax strategy. But technology alone isn't enough – clients need advisors who can make them aware of the complexity of this issue, the consequences of an insufficient approach to compliance, and the best, most efficient, most accurate path to complying in a constantly changing regulatory environment.

This is not just an opportunity – for helping clients, expanding the CPA's advisory role, and for strengthening client relationships. It is a responsibility. Now more than ever, with the IRS's increased scrutiny of crypto asset reporting, it is time for CPAs to get ahead of this issue in order to meet their responsibility of ensuring client compliance.

To learn more about crypto asset solutions and resources to help your clients comply with crypto asset reporting, visit

[CPA.com/Crypto](https://www.cpa.com/crypto)

About Lukka

Founded in 2014, Lukka is a trusted, blockchain-native technology company that delivers leading products for the crypto asset ecosystem. Lukka's products automate and optimize accounting, audit and tax processes for investors, funds, fund administrators, OTC and proprietary trading firms, exchanges, miners, protocols and accounting firms. Lukka's premier solutions enable the transformation of distributed and decentralized data into auditable information within a highly scalable and secure AICPA SOC 1 Type 2 infrastructure. For information about Lukka, visit www.lukka.tech.



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