

# **The Statement of Digital Assets**

Bridging GAAP: A New Standard for Reporting On-Chain Assets

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# Statement of Digital Assets Public Benefit Collaboration

The number of 'crypto native' and traditional businesses that transact with digital assets has seen unprecedented growth in the past five years. This adoption of a new asset class has necessitated an increased focus on accounting for tax reporting and operations management purposes; however IRS and FASB rules can be generously described as 'evolving', and the systems required to convert on-chain activity to the general ledger are developing in lockstep to the blockchains they monitor. The ultimate goal of SoDA is to provide a lasting and transparent bridge between accurate GAAP reporting of digital assets and the details from multiple wallets, centralized exchanges, and other cryptographically-based ownership and/or custody arrangements. We started with the balance sheet because of a treasury's importance to crypto-native businesses, however further exploration into other areas may follow. The following is a public benefit collaboration intended to open source a best practice that has been deployed among numerous projects with the goal of contributing to "crypto's GAAP accounting moment."<sup>1</sup>

This collaboration was made possible by the ethos of the crypto industry to support one another and contribute time towards a public benefit that will serve as a rising tide that will lift all boats. There are numerous crypto professionals who have contributed their time and without their help this white paper would not have been possible (full attribution will be included in a future version as approval is pending at their respective firms, when we started this project we intended to release it at Mainnet 2023).

This paper is structured as a narrative, but most sections can be read independently depending on the reader's focus. In sequential order we will cover: the macro case for SoDA and its relevance; SoDA's core benefits; SoDA's origins and the state of crypto accounting; real world SoDA use cases; and finally additional considerations including how SoDA is constructed.

Finally, please note the following contains general information only and is not rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. It is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your organization. Before making any decision or taking any action that may affect your organization, you should consult a qualified professional advisor.

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<sup>1</sup> As described by Ryan Selkis, CEO of Messari in the 2022 Theses report.

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# I. Executive Summary

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The Statement of Digital Assets is a standardized reporting approach that clarifies an organization's digital asset holdings, providing a bridge between Generally Accepted Accounting Principles (GAAP) based balance sheet reporting and the value represented on-chain. SoDA provides detailed support to the digital asset entry on the balance sheet by listing every wallet and asset combination (Wallet/Asset Pair) along with business use or purpose. Fair market value is also calculated to provide a more rational sense of liquidity. Taken with a firm's fiat holdings and select other assets, SoDA attempts to present a complete picture of a firm's liquidity.

The ultimate goal of SoDA is to provide a lasting and transparent bridge between accurate GAAP reporting of digital assets and the details from multiple wallets, centralized exchanges, and other cryptographically-based ownership and/or custody arrangements. The first use case was delivering a full liquidity picture for managers of and investors in growth stage businesses with digital assets on their balance sheet. Additional beneficiaries now include auditors, tax planners, regulators, analysts, and many more direct and indirect stakeholders.

A balance sheet exists to report what a business owns (assets), what it owes (liabilities) and what the ownership or equity in the business is. GAAP is the financial reporting language of business in the United States, unfortunately existing reporting standards for businesses interacting with digital assets can make the balance sheet opaque. Current practice for recording digital assets breaks several core purposes of a balance sheet – primarily understanding and assessing liquidity. The balance sheet should tell the complete financial story for an entity but unfortunately for those that hold or transact in digital assets, it does not. This inadequacy is due to digital assets being defined as indefinite-lived intangible assets that necessitates the valuation at the lower of cost or impaired value. By definition, values on the balance sheet can only be marked down, not up (or “marked to market”).

While there has been recent FASB guidance that may require fair market value reporting of select digital assets, the new rules are not complete as NFTs (non-fungible tokens), native tokens (tokens created or issued by the reporting entity), select tokens representing real world assets (RWAs), and wrapped tokens will be excluded<sup>2</sup>. This range of treatments would actually complicate balance sheet reporting with the potential of having to report both fair market value and intangible asset methodologies<sup>3</sup>. At the highest level, this challenges the operation of digital asset-based businesses as questions persist regarding operating runway, tax liability, and other key performance metrics. It also makes it difficult to assess, and nearly impossible to report, a firm's true liquidity to analysts, investors, regulators, and auditors as they are not served for similar reasons.

Even if we apply the rules as they are, the process of calculating GAAP-compliant crypto activity is a non-trivial task and relies heavily on crypto subledger technology. These software platforms translate on-chain activity into journal entries for revenue, cost of sales, expenses and any associated realized gains/losses. Additionally, they support the balance sheet crypto entries of both assets and liabilities.

It goes without saying that recording accurate journal entries is of the utmost importance in bookkeeping, however making sense of what is making up the entry is essential to all stakeholders and professionals that need visibility to a firm's health. SoDA is a tool for providing this visibility as it relates to digital assets.

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<sup>2</sup>The accounting rules of an asset does not change just because it is represented by a token.

<sup>3</sup>FASB Exposure Draft: Proposed Accounting Standards Update, Accounting for and Disclosure of Crypto Assets (Subtopic 350-60).



Per GAAP, the inclusion of a single line entry has to date formed a best practice of digital asset reporting on the balance sheet for an organization. While this single entry is technically correct, it often fails to provide meaningful insight for those interested in understanding the impact of digital assets on the balance sheet – whether that be business owners, investors, business partners, regulators, and professional service partners.

For reasons detailed below, this entry fails to reflect the full nature and value in a portfolio of digital assets including factors that might include liquidity, purpose, restrictions, tax gain or loss, and other key information. The single account also lacks any formal backing for how it has been derived thereby limiting transparency, inspection, and analysis.

Put simply, a single account that summarizes an entity's entire digital asset portfolio is meaningless without 1) a detailed backing sheet for the digital assets owned or held by an organization and 2) a commonly accepted framework for reflecting their fair market value and their individual liquidity profiles along with notable call outs which might include asset risk, counterparty risk, tax liability, and more. The intent of the Statement of Digital Assets is to provide this backing and structure, thereby providing a more complete and transparent view as to the health and operation of digital asset-enabled businesses.

| EOM                                 |                      | Statement of Digital Assets |                                    |               |                 |               |                  |              |
|-------------------------------------|----------------------|-----------------------------|------------------------------------|---------------|-----------------|---------------|------------------|--------------|
|                                     |                      | As of EOM                   |                                    |               |                 |               |                  |              |
|                                     |                      | Role                        | Wallet                             | Asset         | Quantity        | USD FMV       | USD Book/BS      |              |
|                                     |                      |                             |                                    |               |                 |               | STH              | STH          |
| <b>ASSETS</b>                       |                      |                             |                                    |               |                 |               |                  |              |
| <b>Current Assets</b>               |                      |                             |                                    |               |                 |               |                  |              |
| Total 11100 CASH ACCOUNTS           | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>11660 CRYPTOCURRENCY</b>         | <b>\$000,000,000</b> |                             |                                    |               |                 |               |                  |              |
| Total 11600 CRYPTOCURRENCY          | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| Accounts Receivable                 |                      |                             |                                    |               |                 |               |                  |              |
| Total Accounts Receivable           | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| Other Current Assets                |                      |                             |                                    |               |                 |               |                  |              |
| Total Other Current Assets          | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| Total Current Assets                | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>Fixed Assets</b>                 |                      |                             |                                    |               |                 |               |                  |              |
| Total Fixed Assets                  | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>Other Assets</b>                 |                      |                             |                                    |               |                 |               |                  |              |
| Total Other Assets                  | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>TOTAL ASSETS</b>                 | <b>\$000,000,000</b> |                             |                                    |               |                 |               |                  |              |
| <b>LIABILITIES AND EQUITY</b>       |                      |                             |                                    |               |                 |               |                  |              |
| <b>Liabilities</b>                  |                      |                             |                                    |               |                 |               |                  |              |
| <b>Current Liabilities</b>          |                      |                             |                                    |               |                 |               |                  |              |
| Total Current Liabilities           | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>Total Long-Term Liabilities</b>  |                      |                             |                                    |               |                 |               |                  |              |
| Total Long-Term Liabilities         | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>Total Liabilities</b>            |                      |                             |                                    |               |                 |               |                  |              |
| Total Liabilities                   | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>Equity</b>                       |                      |                             |                                    |               |                 |               |                  |              |
| Total Equity                        | \$000,000,000        |                             |                                    |               |                 |               |                  |              |
| <b>TOTAL LIABILITIES AND EQUITY</b> | <b>\$000,000,000</b> |                             |                                    |               |                 |               |                  |              |
|                                     |                      | Ops / Admin                 | Hot Wallet (3PC) 'XXXX'            | ETH           | 1,176.0         | 2,234,400     | 4,132,880        |              |
|                                     |                      | Ops / Admin                 | Contractor Payments (3PC)          | XYZ           | 75,000.0        | 243,750       | -                |              |
|                                     |                      | Ops / Admin                 | Engineering (3PC)                  | ETH           | 58.8            | 111,720       | 206,644          |              |
|                                     |                      | Ops / Admin                 | Engineering (3PC)                  | XYZ           | 50,000.0        | 162,500       | -                |              |
|                                     |                      | Ops / Admin                 | Marketing (3PC)                    | XYZ           | 120,000.0       | 390,000       | -                |              |
|                                     |                      | Ops / Admin                 | Public Goods / Grants (Multi)      | XYZ           | 200,000.0       | 650,000       | -                |              |
|                                     |                      | Ops / Admin                 | Misc-Ops (Self)                    | ETH           | 24.5            | 46,550        | -                |              |
|                                     |                      | Ops / Admin                 | Custodied Trading Account (Multi)  | ETH           | 303.3           | 576,220       | 1,065,811        |              |
|                                     |                      | Ops / Admin                 | Trading Account (Multi)            | XYZ           | 25,000.0        | 81,250        | -                |              |
|                                     |                      | Ops / Admin                 | Trading Account (Multi)            | ETH           | 82.0            | 155,729       | 288,045          |              |
|                                     |                      | Ops / Admin                 | Test (Self)                        | ETH           | 9.8             | 18,620        | 34,441           |              |
|                                     |                      | Tax Liability               | Tax Liability (3PC)                | ETH           | 245.0           | 465,500       | 861,017          |              |
|                                     |                      | NET                         | Meta NFT 1 (3PC)                   | BAYC-1245     | 1.0             | 250,000       | 250,000          |              |
|                                     |                      | Native                      | Native Restricted Treasury (3PC)   | XYZ           | 1,000,000,000.0 | 3,250,000,000 | -                |              |
|                                     |                      | Native                      | Native Locked Treasury (3PC)       | XYZ           | 5,000,000.0     | 16,250,000    | -                |              |
|                                     |                      | Native                      | Native Unrestricted Treasury (3PC) | XYZ           | 10,000,000.0    | 32,500,000    | -                |              |
|                                     |                      | Yield                       | DeFi Wallet / Treasury (3PC)       | SLP-USDC-WETH | 1.0             | -             | -                |              |
|                                     |                      | Yield                       | SLP-USDC-WETH (3PC)                | USDC          | 353,800.5       | 353,801       | 353,801          |              |
|                                     |                      | Yield                       | SLP-USDC-WETH (3PC)                | WETH          | 100.0           | 353,801       | 240,000          |              |
|                                     |                      |                             |                                    |               |                 |               | \$ 3,304,843,840 | \$ 7,518,740 |

*SoDA Tie Out: Most digital assets are classified as indefinite-lived intangible assets (with GAAP reported at the lower of cost or market) - SoDA ties out to the balance sheet.*

## Key Insights

The Statement of Digital Assets is designed to be readily understood by financial professionals, given that it builds upon familiar GAAP rules and guidelines. Furthermore, it is also tailored to be intuitive for those operating digital asset-based businesses, as it flexibly integrates the diverse and dynamic characteristics of digital assets, along with their typical storage and operational uses.

| Statement of Digital Assets |                                    |               |                 |                         |                     |
|-----------------------------|------------------------------------|---------------|-----------------|-------------------------|---------------------|
| As of EOM                   |                                    |               |                 |                         |                     |
| Role                        | Wallet                             | Asset         | Quantity        | USD FMV                 | USD Book/BS         |
|                             |                                    |               |                 | \$Ttl                   | \$Ttl               |
| Ops / Admin                 | Hot Wallet (3PC) 'XXXX'            | ETH           | 1,176.0         | 2,234,400               | 4,132,880           |
| Ops / Admin                 | Contractor Payments (3PC)          | XYZ           | 75,000.0        | 243,750                 | -                   |
| Ops / Admin                 | Engineering (3PC)                  | ETH           | 58.8            | 111,720                 | 206,644             |
| Ops / Admin                 | Engineering (3PC)                  | XYZ           | 50,000.0        | 162,500                 | -                   |
| Ops / Admin                 | Marketing (3PC)                    | XYZ           | 120,000.0       | 390,000                 | -                   |
| Ops / Admin                 | Public Goods / Grants (Multi)      | XYZ           | 200,000.0       | 650,000                 | -                   |
| Ops / Admin                 | Misc-Ops (Self)                    | ETH           | 24.5            | 46,550                  | 86,102              |
| Ops / Admin                 | Custodied Trading Account (Multi)  | ETH           | 303.3           | 576,220                 | 1,065,811           |
| Ops / Admin                 | Employee Incentive (3PC)           | XYZ           | 25,000.0        | 81,250                  | -                   |
| Ops / Admin                 | Trading Account (Multi)            | ETH           | 82.0            | 155,729                 | 288,045             |
| Ops / Admin                 | Test (Self)                        | ETH           | 9.8             | 18,620                  | 34,441              |
| Tax Liability               | Tax Liability (3PC)                | ETH           | 245.0           | 465,500                 | 861,017             |
| NFT                         | Meta NFT 1 (3PC)                   | BAYC-1245     | 1.0             | 250,000                 | 250,000             |
| Native                      | Native Restricted Treasury (3PC)   | XYZ           | 1,000,000,000.0 | 3,250,000,000           | -                   |
| Native                      | Native Locked Treasury (3PC)       | XYZ           | 5,000,000.0     | 16,250,000              | -                   |
| Native                      | Native Unrestricted Treasury (3PC) | XYZ           | 10,000,000.0    | 32,500,000              | -                   |
| Yield                       | DeFi Wallet / Treasury (3PC)       | SLP-USDC-WETH | 1.0             |                         |                     |
| Yield                       | SLP-USDC-WETH (3PC)                | USDC          | 353,800.5       | 353,801                 | 353,801             |
| Yield                       | SLP-USDC-WETH (3PC)                | WETH          | 100.0           | 353,801                 | 240,000             |
|                             |                                    |               |                 | <b>\$ 3,304,843,840</b> | <b>\$ 7,518,740</b> |

*Book Value vs. Fair Market Value: Based on the nuances associated with crypto accounting the variance between BV and FMV can make the balance sheet opaque.*

## Book Value vs. Fair Market Value

At the heart of SoDA lies the distinction between book value and fair market value applied to each Wallet/Asset Pair. Book value, in line with the current GAAP, indicates the lower of either the original cost of the asset or its fair market value (per Lower Cost or Market "LOCOM"), often diverging significantly from the fair market value.

Though the balance sheet 'build' offers a reliable proof, it falls short in guiding strategic decision-making, risk management, and investor communication. Book value downplays a firm's liquidity, while fair market value might overstate it, subject to market liquidity, asset risk, and latent tax liability. Therefore, a detailed grasp of both book value and fair market value will facilitate a more accurate understanding of a firm's true liquidity.

*Note that the reporting guidance for digital assets will change as the Financial Accounting Standards Board (FASB) has voted on a standards update to allow for the reporting of select digital assets at fair market value. In the event of any change, SoDA would be*



more relevant as a level setting analysis for an organization to view all digital asset's book value and fair market value in the same context.

| Statement of Digital Assets |                                    |               |              |                  |              |
|-----------------------------|------------------------------------|---------------|--------------|------------------|--------------|
| As of EOM                   |                                    |               |              |                  |              |
| Role                        | Wallet                             | Asset         | Quantity     | USD FMV          | USD Book/BS  |
|                             |                                    |               |              | \$Ttl            | \$Ttl        |
| Ops / Admin                 | Hot Wallet (3PC) 'XXXX'            | ETH           | 1,176.0      | 2,234,400        | 4,132,880    |
| Ops / Admin                 | Contractor Payments (3PC)          | XYZ           | 75,000.0     | 243,750          | -            |
| Ops / Admin                 | Engineering (3PC)                  | ETH           | 58.8         | 111,720          | 206,644      |
| Ops / Admin                 | Engineering (3PC)                  | XYZ           | 50,000.0     | 162,500          | -            |
| Ops / Admin                 | Marketing (3PC)                    | XYZ           | 120,000.0    | 390,000          | -            |
| Ops / Admin                 | Public Goods / Grants (Multi)      | XYZ           | 200,000.0    | 650,000          | -            |
| Ops / Admin                 | Misc-Ops (Self)                    | ETH           | 24.5         | 46,550           | 86,102       |
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| Ops / Admin                 | Trading Account (Multi)            | ETH           | 82.0         | 155,729          | 288,045      |
| Ops / Admin                 | Test (Self)                        | ETH           | 9.8          | 18,620           | 34,441       |
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| NFT                         | Meta NFT 1 (3PC)                   | BAYC-1245     | 1.0          | 250,000          | 250,000      |
| Native                      | Native Restricted Treasury (3PC)   | XYZ           | 1,000,000.0  | 3,250,000.00     | -            |
| Native                      | Native Locked Treasury (3PC)       | XYZ           | 5,000,000.0  | 16,250,000       | -            |
| Native                      | Native Unrestricted Treasury (3PC) | XYZ           | 10,000,000.0 | 32,500,000       | -            |
| Yield                       | DeFi Wallet / Treasury (3PC)       | SLP-USDC-WETH | 1.0          |                  |              |
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| Yield                       | SLP-USDC-WETH (3PC)                | WETH          | 100.0        | 353,801          | 240,000      |
|                             |                                    |               |              | \$ 3,304,843,840 | \$ 7,518,740 |

*Fair Market Value: A variety of factors can cause an extreme variance from reported GAAP, including: increase in crypto prices, uncirculated native tokens, NFTs, RWAs among other things.*

## Fair Market Value Idiosyncrasies

With respect to how fair market value might be different from book value, let's look at a few of the line items in the example above.

- Fair Market Value of Tokens – Fair Market Value Measurement (per ASC 820) is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Per the example above, for ETH alone there is a significant variance between book and fair market value.
- Native Tokens – Native tokens are defined as tokens created or issued by the reporting entity or its related parties (aka governance or utility tokens). If a project has distributed a certain number of tokens to their community via pre-sales, airdrops, grants, and/or other means but retained a portion for treasury, the remaining tokens would be on the balance sheet per GAAP at no value (\$0.00). Assuming there is a market for those tokens on a centralized exchange or through an automated market maker (AMM), the FMV would be guided by the current market price – which would likely represent a substantial difference from cost. There are also tax considerations and any disposition would be subject to capital gains as detailed below.
- Non-Fungible Tokens (NFTs) – By their very definition, non-fungible tokens represent an asset that is unique and likely lacks a market-based pricing approach to attain their fair market value. Third-party custody firms will charge a percent of a profile picture (PFP) collection's floor price when determining asset based pricing. There are also algorithmic-based applications that will

value specific categories of NFTs based on their provenance and/or specific attributes. As one might imagine, there is a bit of art and science involved when determining the FMV of an NFT.

- **Unrealized Tax Liabilities** – The difference between book and fair market value represents an unrealized gain of a particular asset. If sold at the fair market value price, the business would be subject to capital gains tax up to 21% based on the length of time the assets were held. Based on past experience, unrealized tax liability can be a non-trivial amount when determining a firm’s true liquidity value.
- **Restricted Tokens** – Some assets might be restricted in terms of usage or duration. An example might include assets held in custody on behalf of customers. Another might be tokens that are staked into a network or protocol and have a time-determined duration to them. Some staking duration could be on a monthly basis, others could be on a longer term or indefinitely as the case of an intention by a company to stake a network for operational purposes.
- **Real World Assets (RWA)** – The tokenization of physical and off-chain financial assets has been a long standing promise of blockchain technology and is gaining increasing (if not measured) momentum. Tokenized assets can include real estate, art, treasuries, and repo agreements. FASB’s most recent exposure draft deemed that RWAs in general will continue to be treated as intangible assets, their ultimate treatment will ultimately depend on the underlying asset that has been tokenized.
- **Off-Balance Sheet Digital Assets** – When a business hires a market maker to create liquidity for their token, a standard arrangement includes a loan of the project’s token to the market maker to provide market liquidity (as a buyer or seller). When domain and control of the tokens are transferred to the market maker it is treated as a disposition and is not visible or recognized within the wallet infrastructure, although there is still legal ‘off-chain’ ownership of the digital assets. Other instances can include loans to community participants to encourage building on a particular ecosystem.

## **SoDA Primitives: Wallet, Asset, and Role**

SoDA’s first order is providing clarity to an entity’s digital asset full liquidity picture. The core ‘primitives’ in pursuit of this analysis are comprised of an entity’s wallets, the assets in those wallets, and the roles of those wallets which are unique to a business and tagged/determined by the user.

The key insight here is that digital assets are highly diverse in nature with varying liquidities, durations, and asset types. The organization around wallet, asset type, and role provide clarity as to the nature, use, and location of the asset, and ultimately a firm’s approach to treasury management.

### *Wallet*

The use of wallets as an organizing primitive serves not only to determine the location of assets but also identify the store of specific assets (although assets are not wallet specific) and general intent of use. Most digital asset-based businesses will use different wallets with different signatories and signing arrangements. ‘Wallet’ is a human-readable identifier and each wallet is tied to either a self-hosted wallet address or a wallet held by a third party custodian.

### *Asset*

Asset refers to is the digital currency or token held, typically denoted by its token name, NFT name, or other communally-assigned asset identifier. Assets can be fungible (interchangeable with other assets of the same type) or non-fungible (representing ownership and provenance in a unique asset including digital arts, event ticketing and off-chain assets).

### *Wallet/Asset Pair*

Wallet/Asset Pairs are the atomic elements of SoDA, representing the building blocks that tell the story of an organization's treasury. They can serve multiple roles and have a variety of different attributes. They can be combined with other pairs that serve similar roles to get a better understanding of a particular treasury profile or be segregated to identify restricted or locked digital assets. For tax gain/loss harvesting purposes Wallet/Asset Pair segregation also allows for easier basis tracking.

### *Role*

Role reflects the varied use of Wallet/Asset Pairs within digital asset based businesses. Roles are user generated and specific to businesses and allow users to 'roll up' their wallet balances in categories that align with the way their treasury is managed. The particular categorization used allows for multifaceted roll-up views.

Roles are entity-specific uses applied to the Wallet/Asset Pairs that provide important information for how to perceive their functions and uses as part of business operations, treasury, custodial holdings, or other.

Here is a list of common Roles currently applied in existing statements.

|                   |                                                                                                                                                                                                                            |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Restricted Tokens | Tokens distributed to an organization may have strict stipulations regarding their use (community grants, employee incentives, etc.) - these tokens should be segregated in dedicated wallets based on their intended use. |
| Yield             | Wallets used for staking and DeFi yield-generating                                                                                                                                                                         |
| Tax Liability     | Transferring token-based revenue into stable-coins to mitigate price fluctuation                                                                                                                                           |
| OPs/Admin         | Wallets used for operational purposes across an organization such as those used in R&D, marketing, or engineering                                                                                                          |
| NFTs              | NFTs held across all wallets                                                                                                                                                                                               |

| Statement of Digital Assets |                                    |               |                 |                  |              |
|-----------------------------|------------------------------------|---------------|-----------------|------------------|--------------|
| As of EOM                   |                                    |               |                 |                  |              |
| Role                        | Wallet                             | Asset         | Quantity        | USD FMV          | USD Book/BS  |
|                             |                                    |               |                 | \$Ttl            | \$Ttl        |
| Ops / Admin                 | Hot Wallet (3PC) 'XXXX'            | ETH           | 1,176.0         | 2,234,400        | 4,132,880    |
| Ops / Admin                 | Contractor Payments (3PC)          | XYZ           | 75,000.0        | 243,750          | -            |
| Ops / Admin                 | Engineering (3PC)                  | ETH           | 58.8            | 111,720          | 206,644      |
| Ops / Admin                 | Engineering (3PC)                  | XYZ           | 50,000.0        | 162,500          | -            |
| Ops / Admin                 | Marketing (3PC)                    | XYZ           | 120,000.0       | 390,000          | -            |
| Ops / Admin                 | Public Goods / Grants (Multi)      | XYZ           | 200,000.0       | 650,000          | -            |
| Ops / Admin                 | Misc-Ops (Self)                    | ETH           | 24.5            | 46,550           | 86,102       |
| Ops / Admin                 | Custodied Trading Account (Multi)  | ETH           | 303.3           | 576,220          | 1,065,811    |
| Ops / Admin                 | Employee Incentive (3PC)           | XYZ           | 25,000.0        | 81,250           | -            |
| Ops / Admin                 | Trading Account (Multi)            | ETH           | 82.0            | 155,729          | 288,045      |
| Ops / Admin                 | Test (Self)                        | ETH           | 9.8             | 18,620           | 34,441       |
| Tax Liability               | Tax Liability (3PC)                | ETH           | 245.0           | 465,500          | 861,017      |
| NFT                         | Meta NFT 1 (3PC)                   | BAYC-1245     | 1.0             | 250,000          | 250,000      |
| Native                      | Native Restricted Treasury (3PC)   | XYZ           | 1,000,000,000.0 | 3,250,000,000    | -            |
| Native                      | Native Locked Treasury (3PC)       | XYZ           | 5,000,000.0     | 16,250,000       | -            |
| Native                      | Native Unrestricted Treasury (3PC) | XYZ           | 10,000,000.0    | 32,500,000       | -            |
| Yield                       | DeFi Wallet / Treasury (3PC)       | SLP-USDC-WETH | 1.0             |                  |              |
| Yield                       | SLP-USDC-WETH (3PC)                | USDC          | 353,800.5       | 353,801          | 353,801      |
| Yield                       | SLP-USDC-WETH (3PC)                | WETH          | 100.0           | 353,801          | 240,000      |
|                             |                                    |               |                 | \$ 3,304,843,840 | \$ 7,518,740 |

*Roles and Tags: Assigning roles to Wallet/Asset Pairs allows for a variety of rollups to present a multifaceted view of treasury along with standardized reporting for a variety of stakeholders*

### III. Statement of Digital Assets Benefits

*SoDA's foundation provides financial transparency for digital assets on a balance sheet supporting several core pillars including: what is owned vs. what is held; what is locked or restricted; offering multiple lenses on holdings; and standardizing reporting for a variety of stakeholders.*

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#### Transparency of Liquidity Profile

One of the most significant benefits of the Statement of Digital Assets is transparency of the liquidity profile of an organization's digital assets, as it provides a readily available map of the role, location, and type of digital assets held. An underlying principle of blockchain technology is transaction validation via network participants and verification of those transactions 'on-chain'. Balances and transactions maintained by a public blockchain are open for inspection and/or verification (whether out in the open or via the proper cryptographic proofing methods of shielded transactions.). Having verified Wallet/Asset Pair balances is essential as they can be reconciled to associated blockchains.

The analysis provided by SoDA quantifies and qualifies the assets owned by an organization and those held on behalf of customers<sup>5</sup>. It offers benefits in terms of transparency of asset risk, accessibility, and multifaceted analysis. There are a variety of cryptocurrencies with different designs and adoption which inform the asset's quality and liquidity.

The table below provides a snapshot of common digital assets held by businesses along with their associated risks. While SoDA cannot quantify the asset specific risks, it does allow for transparency so a reader can make their own determinations.

| Digital Asset | Definition and Risks                                                                                                                                                                                                                                                |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stablecoins   | <ul style="list-style-type: none"><li>● Pegged to a fiat currency, with equal or higher assets backing</li><li>● Can be treated similarly to fiat for runway and cash planning</li><li>● Not without risk</li></ul>                                                 |
| Bitcoin & ETH | <ul style="list-style-type: none"><li>● Native coins for leading blockchains</li><li>● Highly liquid</li><li>● Value can fluctuate similarly to risk equities</li></ul>                                                                                             |
| Altcoins      | <ul style="list-style-type: none"><li>● Tokens that are not Bitcoin or Ethereum</li><li>● Subject to risk-asset valuation swings</li><li>● Can be impacted by a lack of liquidity and the utility associated with the projects they represent</li></ul>             |
| Native Tokens | <ul style="list-style-type: none"><li>● Altcoins that are issued by the reporting entity or associated with it via a related entity</li><li>● May have illiquid market state conditions based on the size of the treasury (even if public trading exists)</li></ul> |

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<sup>5</sup> Subject to audit.

|                     |                                                                                                                                                                                                                                                                                                                                        |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Non-Fungible Tokens | <ul style="list-style-type: none"> <li>• Can include PFPs and other generative art in addition to tokenized real-world assets</li> <li>• Inexact/highly variable valuation processes</li> <li>• Can have indeterminate/challenging liquidity profiles</li> </ul>                                                                       |
| DeFi & CeFi         | <ul style="list-style-type: none"> <li>• Primarily tokens associated with yield generating protocols</li> <li>• Yield opportunities primarily from lending and staking</li> <li>• Risks can include limited access to liquidity, smart contract flaws, counterparty risk, regulatory risk, and a variety of other scenarios</li> </ul> |

While SoDA will not ‘score’ the quality of the digital assets on a balance sheet, it will clearly articulate the underlying assets behind the GAAP entry. Note that when assessing the quality of digital assets within operating dashboards and/or other downstream analyses, a variety of risk factors and valuation metrics can be applied. Primary considerations are the market validation of the asset, which might include attributes such as its acceptance, stability, and/or performance within the broader market. The technical aspects and security features of the asset along with its vulnerability to cyber threats can also be considered. The asset's novelty, regulatory landscape, and liquidity concerns can additionally be taken into account – understanding that newer assets may pose more risk, regulatory changes can impact an asset's future, and price volatility can affect its liquidity.

| Asset     | Qty             | USD FMV          | USD Book/BS   |
|-----------|-----------------|------------------|---------------|
| ETH       | 1,899.3         | 3,893,739        | 6,674,939     |
| XYZ       | 1,015,470,000.0 | 3,301,740,000    | -             |
| BAYC-1245 | 1.0             | 250,000          | 250,000       |
| WETH      | 100.0           | 353,801          | 240,000       |
| USD       | 37,651,801.9    | 37,651,802       | 37,651,802    |
| USDC      | 4,203,801       | 4,203,801        | 4,203,801     |
| Total     |                 | \$ 3,348,093,142 | \$ 49,020,541 |

*Rollup by Asset: Defining an organization’s treasury by asset type can provide an immediate snapshot of risks and other factors.*

### Transparency of Customer Assets and Other Balance Sheet Liabilities

Where the asset section of a balance sheet represents what an organization owns, its liabilities are what is owed including, but not limited to, digital assets custodied on behalf of customers. Customer custody must be demonstrable along with detailed back up to ensure an organization’s solvency with corresponding asset coverage.

While the the focus of this paper is the bridging of an organization's digital assets to GAAP reporting, SoDA can easily serve to track its customer liabilities (assets custodied on customers behalf) and provide the necessary work papers to demonstrate solvency to auditors, regulators and other parties seeking to confirm solvency.

## Asset Accessibility

Asset accessibility can be defined as where the assets are held along with restrictions of use and whether they are owned by the entity or are being held for customers. Through the use of roles, identifiers of specific Wallet/Asset Pairs can be tagged to call out restrictions of use, and, most importantly, what can be considered liquidity for a business (both short and long term) and what cannot.

The issues of where a digital asset is custodied (either self or third party) and who has access and for what purpose are details that can be gleaned from a SoDA. The primary risks that can be mitigated include assessment of operational security by Wallet/Asset Pair (i.e. who internally has access), and identification of any risks that might be associated with the custody provider.

| <b>Accessibility</b> | <b>Description</b>                                                   |
|----------------------|----------------------------------------------------------------------|
| Locked               | <i>Written into smart contract</i>                                   |
| Restricted           | <i>Allocated for programs such as token comp or community grants</i> |
| Staked               | <i>Tokens locked in smart contracts</i>                              |
| Off-Balance Sheet    | <i>Loans to market makers</i>                                        |

*Accessibility: Sample table of accessibility classifications*

## Multi-Faceted Analysis

Digital assets are used for a variety of purposes and serve a significant number of different roles within an organization. The Statement of Digital Asset permits business operators to tag Wallet/Asset Pairs within the analysis by user-defined roles to provide for multifaceted analysis of an entity's treasury.

While a review of Wallet/Asset Pairs at both book value and fair market value reveal a significant amount more about an organization's treasury, it still only presents a two-dimensional view. Each Wallet/Asset Pair may have multiple taggable traits that can then provide for a variety of rollups to further inform the reader of financials about the state of digital asset health. Key areas to 'double click' here include: cash and equivalent runway, FMV of non-restricted digital assets, tax liability of unrealized gains, tax reserved in stablecoin for income tax purposes, and many others.

## Standardization of Reporting

Standardizing around a generalized Statement of Digital Assets format benefits many stakeholders and creates a framework that can be used to inform many business processes and downstream analysis. Just as the income statement, balance sheet, and cash flow statements touch on a broad spectrum of internal and external needs, the Statement of Digital Assets also brings about comparability for investors and other stakeholders to analyze organizations easily on an apples to apples basis.

A few examples of applications and beneficiaries are listed below. These uses will benefit from a common structure and collective reasoning. Furthermore, the evolution of tools and processes in pursuit of a shared model will further accelerate the capabilities and usefulness of this approach.

### Standardization Beneficiaries

- *Operations Management*
- *Financial Planning and Analysis*
- *Treasury Management*
- *Investor Reporting*
- *Regulatory Compliance*
- *Audit Readiness*
- *Tax Preparation*
- *Token Incentive Planning*



## IV. SoDA's Origin Story & State of Crypto Accounting

*The SoDA structure was born from practical use and its increasing relevance is closely tied to the developing regulatory environment surrounding digital assets.*

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### Origin and History

The intentions behind the earliest versions of the Statement of Digital Asset were not meant to create a formal accounting standard but rather to serve the operational needs of teams running digital asset-based businesses. SoDA was created to provide management a way to understand the value and use of digital assets held in their treasuries. The general format began several years ago with its use within a handful of organizations and then proceeding to more organizations, each with different asset compositions and business models.

The genesis of SoDA was born out of the early days of crypto-accounting, where spreadsheets were largely the tool of choice to translate on-chain activity to balance sheets and generate journal entries for the income statement. This work proved cumbersome, inefficient, and often inaccurate.

Building on these early efforts, one of the principal authors of this paper began work with a Layer 2 blockchain roll-up development lab (and subsequently their foundation) that was projected to handle millions of transactions per month shortly following its launch. This volume would overwhelm any spreadsheet-driven model and necessitate a more robust and scalable solution. Fortunately, crypto subledger solutions were beginning to mature and collaborative work followed that opened the door for SoDA-supporting measures.

*A crypto subledger is a tool that works with a traditional general ledger that tracks all transactions and wallet balances on any of the networks it supports. subledgers are integral for calculating the journal entries for revenue, cost of sales, expenses, realized gains, and calculate the balance sheet entry per US GAAP.*

Close partnership with an early subledger developer proved effective as the team was able to properly close the books to include digital assets reporting performance in compliance with US GAAP. Subsequent beneficiaries of this combined approach included projects focused on infrastructure, foundations, NFTs, gaming, DeFi, and other web3 applications.

Fully GAAP compliant financials, however, highlighted a significant discrepancy in the accounting process. The originating team found that while they could report the correct GAAP entry on the balance sheet, this entry failed to provide an accurate picture of what was owned or the fair market value of current assets. This realization led to the first iteration of a Statement of Digital Assets – the goal being to represent an entity's market value, enhancing transparency and enabling more informed decision-making (and to 'show the build' of the GAAP balance sheet entry to non-accountants).

The most recent expression of the Statement of Digital Assets is an iterative collaboration over the past several years that include accounting and audit professionals, VCs, crypto practitioners, subledger providers, and others.

Although double entry accounting has been used for over 500 years, GAAP reporting standards continue to evolve to address accounting short falls. The Statement of Cash Flows was mandated by the Financial Accounting Standards Board through Statement No. 95, known as FAS 95, in 1987. Before this, companies typically reported a Statement of Changes in Financial Position, which did not provide the same level of detail or insights into a company's cash position as the Statement of Cash Flows does today. The change to mandate the Statement of Cash Flows was aimed at improving the transparency and comparability of financial statements. While no single event might have triggered FAS 95, it also arrived against a backdrop of fraud and rising interest rates, along with the 'Savings and Loan' crisis of the 1980s. Similar to today, the Cashflow Statement began as a suggested working document aiming to improve transparency to all careful readers of corporate finances. It now sits alongside the Balance Sheet and Income Statement as a pillar of financial reporting.

## **SoDA's Balance Sheet Focus**

The focus on supporting the balance sheet was a natural starting point with respect to the accounting and reporting of digital assets as the Statement of Digital Assets attempts to make transparent what was previously an opaque value (per GAAP) – namely what is the value of the digital assets of an organization.

Focusing on digital currency and asset-based income and expenses as well as currency and asset flows are important (and will be even more so in the future), however, any focus on these items is secondary in comparison to providing a detailed and transparent understanding of the digital currencies and assets held and used by an organization.

## **Current State of Crypto Accounting**

Crypto accounting is still in the early stages of development as indicated by a variety of factors which include evolving financial guidelines, uncertain regulatory guidance, developing accounting tools, nonstandard reports and processes, audit and assurance challenges, and more. Ryan Selkis, Founder and CEO of Messari, wrote the following in his 2022 Theses:

*“Want to solve systematic risks? We'll need investments in disclosures standards (hi, Messari!), proof-of-reserves and on-chain monitoring infrastructure, and crypto's GAAP accounting moment...” and also notes “It's time for security and audit standards. Risk waivers. Comprehensive community disclosures.”*

### ***Evolving Reporting Guidelines***

GAAP mandates that digital assets be presented on the balance sheet at the lower of cost or impaired fair market value – however this value, per guidelines, cannot increase. This inability to capture price recovery causes the value of digital assets as presented on the balance sheet to be potentially misleading particularly in the case where the current value of digital assets far exceed the cost of acquisition.

### ***Uncertain Regulatory Guidance***

Regulation regarding the recognition and treatment of digital assets by various government agencies are evolving (and in some cases competing) while legislative initiatives are also developing. This imprecision creates challenges for accountants in determining the appropriate treatment for digital asset-based transactions including such elements as valuation, classification, and recognition.

### ***Developing Accounting Tools***

Traditional accounting tools and software are not fully equipped to handle the unique characteristics of digital assets. Tools for digital assets are available and are increasingly powerful but they are in their early stages, none with complete coverage of all networks and protocols, many require manual keying to properly book transactions, and are directly impacted by protocol updates. On-chain analysis tools are also available but can often require significant customization or expert use in order to satisfy bookkeeping or auditing needs.

### ***Nonstandard Reports and Processes***

With the inadequacy of currently available guidance related to digital assets, there is not a set standard for the reporting of digital assets. This gap causes accountants to create ad hoc reporting, as well as the processes to produce and reconcile said reporting, on a case-by-case basis in order to fulfill the deliverables for an accounting engagement. The lack of consistency in reporting can lead to a potentially misleading presentation of financial data across otherwise similar datasets. Without accepted processes for the reconciliation and delivery of financial reporting, accountants are left in silos to determine how to deliver financial statements.

### ***Audit and Assurance Challenges***

The financial statement audit of companies that hold and transact with digital assets can be challenging for a variety of reasons, many of which revolve around the lack of a reliable system of record. This is not surprising given the novelty of blockchain and smart contract technology, but it does mean that the management of companies seeking a financial statement audit needs to invest in understanding the nature of these assets and underlying technology. Auditors will themselves need to establish whether they can rely on the information produced by blockchains and related smart contracts as audit evidence, and the more complex the blockchain protocol and the more complex a company's activity, the longer it may take the auditor to establish their own understanding, but keep in mind that it is management's assertions that underpin the financial statements, and auditors expect that management has done the work to substantiate those assertions.

### ***Sources and/or Aggregators of Truth***

Given the complexities, volatility, and the decentralized nature of digital assets across a variety of networks, verifiable sources and/or aggregators of truth are necessary in order to confirm and validate digital asset transactions. While there are various subledger platforms that can act as aggregators of these transactions, there are no singular platforms which capture all necessary transactions or ancillary data. Accurate reporting is dependent on tools supporting networks and protocols the organization is using which may or may not be fully aligned.

## **Current Treatments of Digital Assets**

The current treatment of digital assets has developed such that it is serviceable in arriving at a proper accounting and understanding of digital assets but by no means fully rational or optimal. This generalized understanding has been an evolving process which should not be all that surprising since the nature and use of digital assets has been rapidly evolving. Having a lag between business use and accounting treatment is to be expected.

Here is a brief summary of the current state:

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Classification</b> | <p>Digital assets can be classified as a variety of asset forms based on their nature and intended use. Such classifications include investments, intangible assets, and inventory to name a few.</p> <ul style="list-style-type: none"> <li>• Digital assets that are held for investment purposes, such as cryptocurrency or digital collectibles, are typically classified as investments (if it falls under the scope of ASC 946).</li> <li>• Digital assets that are acquired or developed for internal use are typically classified as intangible assets.</li> <li>• Digital assets used to generate revenue through sale or exchange, such as digital products or virtual currencies used in transactions, may be classified as inventory (if one is a broker dealer that meets ASC 940) or recognized as revenue.</li> </ul> |
| <b>Recognition</b>    | <p>Digital assets are recognized in the financial statements when it is probable that the future economic benefits associated with the asset will flow to the entity and the asset has a cost or value that can be reliably measured.</p> <ul style="list-style-type: none"> <li>• For digital assets acquired for a purchase price, its cost basis is recorded as an intangible asset on the balance sheet.</li> <li>• For digital assets developed internally, the costs incurred during the development process may be capitalized as an intangible asset if certain criteria are met, such as technological feasibility and intent to complete the asset.</li> </ul>                                                                                                                                                             |
| <b>Measurement</b>    | <p>Digital assets are measured at cost initially, which includes the purchase price, development costs, and any other directly attributable costs. Subsequently, digital assets are generally measured at cost less accumulated amortization or impairment, unless they are classified as investments or held for trading purposes, in which case they may be measured at fair market value.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Impairment</b>     | <p>If there is an indication that a digital asset may be impaired, such as if its carrying amount exceeds its recoverable amount, the asset must be tested for impairment. If the digital asset is impaired, its carrying amount is reduced to its recoverable amount, which is the higher of its fair market value less costs to sell or its value in use.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Disclosures</b>    | <p>Entities are required to provide adequate disclosures related to their digital assets in the financial statements, including information on the nature and carrying amounts of these assets, the accounting policies applied, and any risks or uncertainties associated with the assets.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

### FASB Exposure Draft Accounting and Disclosure of Crypto Assets

FASB recently voted to approve their changes to disclosure of certain digital assets (FASB Exposure Draft; Proposed Accounting Standards Update; Intangible-Goodwill and Other- Crypto Assets - Subtopic 350-60). At a high level, their decision to move away from the previous lower-of-cost-or-market (LOCOM) model is welcome news to many companies and users of financial statements who preferred a more relevant accounting approach that better reflects real-time market activities.

Not all digital assets, however, are subject to this standard. The digital assets covered include fungible assets that are on a blockchain, not issued by the reporting entity or its related parties, and those that do not provide the asset holder with enforceable rights. In other words, NFTs, digital intangibles, a company's own natively issued tokens, or arrangements with customers, guarantees, or wrapped tokens are effectively excluded.

There are two major changes in measurement approach: (1) organizations now can account for digital assets at fair market value with fluctuations recognized through the income statement and (2) cumulative adjustments will be applied to the opening retained earnings. When it comes to presentation and disclosure requirements, companies now need to separately disclose from other intangibles on the balance sheet and income statement. In addition, non-cash considerations exchanged and immediately converted to cash would be classified as “cash flows from operating activities.”

There are also changes to disclosure requirements for annual reporting. For all individually significant digital assets, the name, cost basis, fair market value, and number of units need to be disclosed. For individually insignificant assets, only the aggregate fair market value and cost basis need to be disclosed. Organizations are further required to provide additional information about digital assets with restrictions (fair market value, nature of remaining duration, and circumstances that could change the restrictions to lapse), a roll forward (additions, disposals, gains and losses, and description of activities), disposal activities (difference between sale price and cost, description of the transaction), and method used to determine the cost basis (e.g., FIFO, specific identification).

Given that this standard does not address ALL digital assets, SoDA is even more important, to bridge the gap between different digital assets that may or may not be listed on the balance sheet at fair market value. This level of transparency, comparability and consistency are essential to the readers of financial statements. The standard adds complexity to an already complex presentation as certain digital assets on the balance sheet will be updated to represent their fair market value while others will be held at cost or impaired.

From a balance sheet perspective, even with these new standards, the current landscape necessitates a two tier reporting structure for digital assets that are 'marked to market' (i.e. Bitcoin or Ethereum) and others that will remain at the lower of cost or impaired value (NFTs, native tokens, wrapped tokens, etc.). The new reporting standards create a lack of parity between reported assets, an issue that SoDA will address via an “apples-to-apples” analysis of assets from both a cost basis and fair market value approach.

## **Evolving Nature of Digital Assets**

The growth and evolution of digital assets will make for a fascinating case study twenty years from now much as the growth and evolution of websites and Internet-based interactions has been in the past thirty years. Many of the first websites were modeled after paper-based analogs whether they were magazines, newspapers, or company marketing catalogs. Similarly, in these early stages of web3, digital representations of analog-rooted financial instruments are some of the first notable offerings – the most noteworthy being currencies and bonds.

But as websites and web interactions quickly departed from their paper-based models to include scale, scope, and form that would have been unrecognizable by early Internet users, the same evolution will happen as the implications and capabilities of digital money and digital assets take hold – especially when combined with smart contracts, programmable logic, decentralized networks, digital wallets, and other

technical innovations. Financial statements and reporting guidelines will have to adapt to these novel innovations in the many forms they may take.

## Growing Relevance of Digital Assets Across Business Sectors

What businesses can benefit from deploying SoDA? The short answer is any organization that has digital assets on their balance sheet. Exposure to digital assets can result from accepting crypto payments, making use of tokens to pay transaction, and/or network (gas) fees as part of operational use of blockchain networks, owning tokens that represent Real World Assets (RWAs), or holding or minting NFTs. Existing businesses range from traditional conglomerates to crypto-native firms with applications that service both businesses and the end consumer. A few examples that display this wide spread in business types include:

- *Nike – Currently selling NFTs via web3 marketplace, with use cases to include participation in future EA games.*
- *St. Regis Aspen Colorado - Real Estate Investment Trust (REIT) tokenized equity of resort through a security token issuance providing global exposure, public access, liquidity and transparency.*
- *Yuga Labs - Developing identity, ownership, utility, and interoperability for NFTs and metaverse as part of the Board Ape Yacht Club.*
- *Base - Providing a secure, low-cost, decentralized Ethereum Layer 2 network scaling solution that will facilitate crypto-based transactions accelerating broad market adoption (incubated within Coinbase).*

Numerous other crypto-native startups that are adapting Web2 business models and also coming up with novel uses of blockchain technology to solve new problems and unlock previously unavailable value.

## The Role of Subledgers and Systems

As the role of digital assets continues to evolve and expand with businesses and other organizations, the importance of maintaining accurate crypto-related records has grown. This evolution has led to the development of the digital asset subledger. A subledger serves as a specialized accounting tool designed to capture and track on-chain transactions. Given the unique features and dynamics of digital assets, there are specific challenges and considerations distinct from fiat currencies, which necessitated the creation of this type of dedicated subledger. Subledgers bridge the complexities of the variety of transactions and categorization by providing an intermediate layer that can be reconciled with the general ledger.

A subledger helps to aggregate digital asset transactions, then segregate and categorize them from purchases, sales, exchanges and transfers to revenue, cost of sales, operating expenses and other transactions. Inbound digital assets (primarily revenue) must be priced at the time it is received for balance sheet (lower of cost or market) reporting, while outbound (expenses and COS) need to be priced accurately to capture any realized gains or losses that need to be reported in other income (FMV less cost basis).

The monthly close process for digital asset wallets can be relatively similar to a bank reconciliation. The use of a subledger is essential for any business that has even minimal digital asset activity. The overall system setup and monthly close process are non-trivial and will likely require an experienced accountant to complete.

## V. SoDA Use Cases

*While there are a broad range of beneficiaries to the Statement of Digital Assets, an application is best understood when discussed 'in use' - the following represent scenarios where SoDA is actively deployed and also being evaluated for use.*

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### Management Operations, Treasury Management, and FP&A

Month-end GAAP financials guide a business through informed decision making, ensure financial stability, and provide guidance for overall business strategy. Treasury management has long been seen as an isolated and subordinate domain within startups but it has now become synonymous within digital-asset based business for an expanded set of operational and digital asset management functions.

Such functions in crypto-related businesses extend beyond fiat management, yield, and banking relationships to now include tracking of all digital assets and their roles and use within an organization. Correspondingly, these functions also extend the risk management responsibilities as it relates to identifying, assessing, and managing asset-based risks that are associated with an organization.

Finance operations within a crypto-related business face multiple challenges. There is a lack of visibility of digital assets and their associated value per GAAP. Repeatable processes also need to be put in place to ensure an organization has actionable data on a regular monthly cadence. These challenges set the stage for the standardized and transparent reporting SoDA provides regarding visibility into the company's digital asset holdings, transactions, and related financial activities.

The Statement of Digital Assets was first developed for management operations along with Treasury Planning & Analysis to support finance departments in running crypto related businesses.

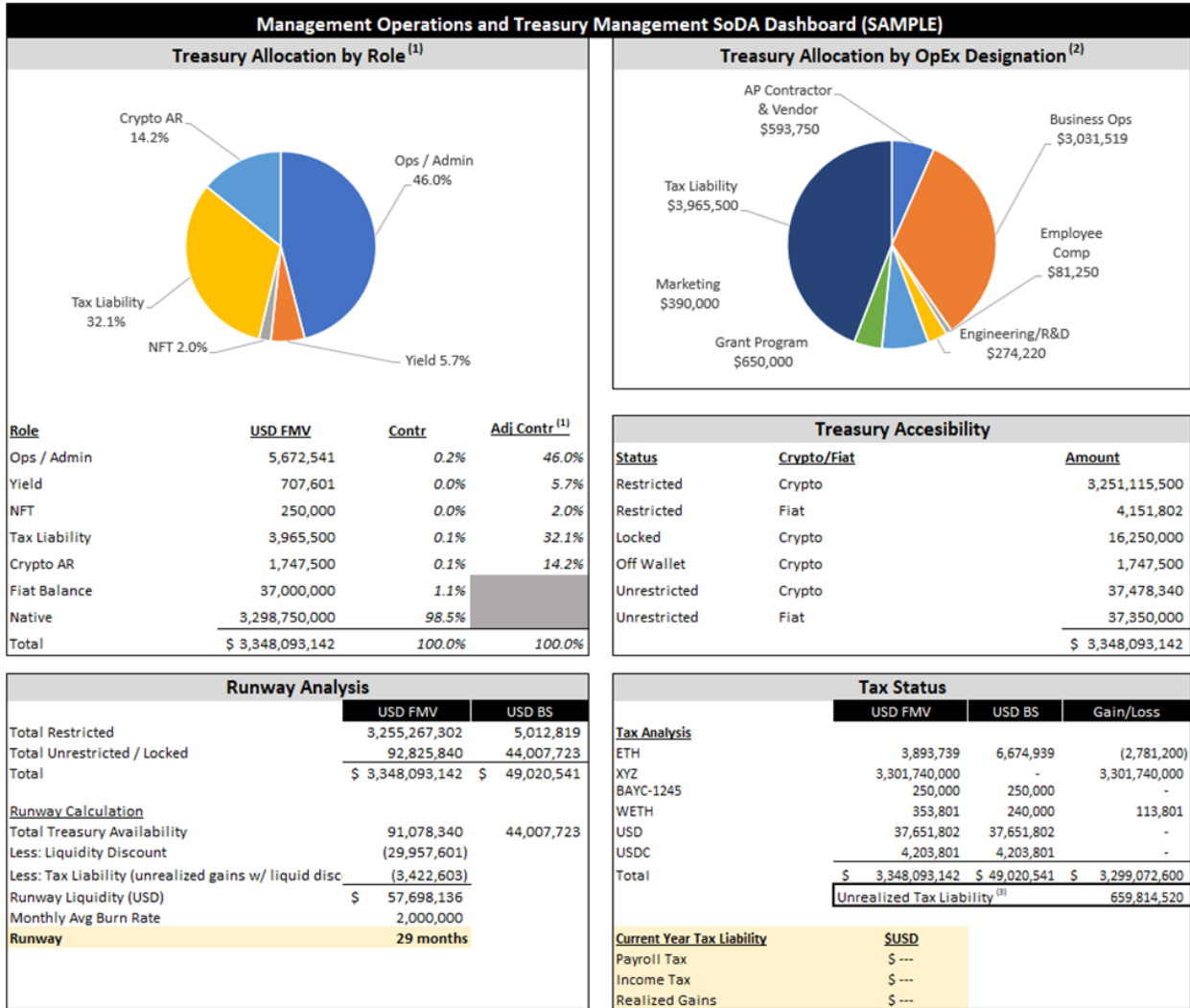
Specific to this use case SoDA is focused on the following:

- **Financial Planning and Analysis (FP&A) / Cash Planning** - The runway of an organization (or the number of months cash coverage of cash expenses) is a premier concern for any business, especially those pre-revenue or working to a sustainable revenue model. SoDA unlocks crypto nuances that might include use restrictions, liquidity discounts, and asset volatility to assess a firm's runway inclusive of crypto in fiat terms (the first view of runway should always be an assessment of cash expenses vs. cash on-hand, liquidity that includes digital assets should be tertiary). Additionally, SoDA provides better visibility for more efficient budgeting, forecasting, and scenario analysis as they relate to digital assets.
- **Tax Planning** – Revenue is recognized in fiat currency equivalent when goods or services are exchanged regardless if it is paid in fiat or with a digital asset. Taxes, however, must be paid on income in government-recognized fiat (the IRS does not accept digital assets as payment). As such, the finance team needs to know an organization's tax liabilities across all transaction forms and have confidence that the amount due is properly segregated and reserved in the treasury in the fiat or fiat equivalent stable coin in the owed currency.



- **Expense Control, Operational Security, and Wallet Hygiene** – Unlike bank accounts, wallets can be added very easily to the operations of a business dedicated to department specific – creating a significant opportunity for budget control while at the same time putting oversight at risk. SoDA provides a mechanism for greater transparency over all wallets associated with operations and also allows management to identify what wallets are supporting what departments or activities. Finally, including SoDA as a part of a monthly financial review allows management to ensure they are looking at the ‘full wallet picture’.
- **Yield Management** – There are many ways a crypto related business can find returns on digital assets in their treasury. SoDA clearly identifies yield-bearing Wallet/Asset Pairs and can identify risk, tax, and interest/yield associated with those allocations. Downstream analysis can detail the success (or failure) of specific yield strategies or as a part of an aggregate analysis.
- **Regulatory and Compliance Readiness** – “Regulatory uncertainty” has become a common refrain in crypto-based circles, however, the need for regulatory clarity and compliance is paramount. Standardized reporting can help the organization comply with relevant accounting standards and regulatory reporting related to digital assets. Data requests from regulators easily gleaned from SoDA can reduce the risk of non-compliance penalties, fines, and reputational damage, and contributes to a more efficient and effective reporting process.
- **Investor Relations and Readiness** – Communication with existing and potential investors is critical. Information rights have long been a fundraising contingency among venture investors. When preparing for a new funding round, accurate and easily procured financials are essential for due diligence that will aid in valuation and also demonstrate that the ‘financial house is in order’. SoDA helps existing and prospective investors better understand the company's digital asset strategies and make more informed investment decisions.

The goal for any FP&A practitioner is to spend the 80% of their time analyzing data (the ‘A’ in the acronym) for actionable insight, unfortunately all too often the inverse of this ratio is true with the majority of time spent gathering, cleaning, and proofing data. The following sample SoDA dashboard represents how a well organized SoDA can drive a standardized reporting package that supports an organization's specific KPIs and other critical data points. This type of dashboard can also be tailored to support the other use cases detailed later in this section.



<sup>(1)</sup> Excludes Fiat Balance and Native tokens.  
<sup>(2)</sup> Excludes Non-Ops and Native Treasury.  
<sup>(3)</sup> Capital gains tax liability assumed at 20%.

*Management Ops Dashboard: Data from SoDA can be built into a management dashboard that will inform treasury allocation, restricted treasury, runway, tax liabilities and other core KPIs.*

## Investor Reporting

Two financial reporting challenges that are commonly experienced by organizations include timeliness of accurate accounting data and variances between GAAP requirements and management reporting needs. Both of these challenges can be further exasperated in businesses that transact with and/or hold material digital assets.

In addition to routine and ad hoc investor and Board communications, most investors require some regular cadence of basic financial reporting from their portfolio companies through information rights reflected in their deal terms. A typical requirement, depending on the stage of the company, may include quarterly financial statements (balance sheet, income statement and cash flow statement), an annual budget (including runway estimate), and audited financials. Under the current guidance, evaluating the liquidity or operating runway of a company with material digital assets on the balance sheet can be

difficult and problematic. For example, a company may hold a digital asset balance that is marked at an impaired value under GAAP that is significantly less than what the liquid fair market value would indicate. How should the company, and the investors, think about runway, capital needs and resource allocation when they're not able to rely on the asset values represented on their balance sheet? Additionally, if a company reports a summarized balance sheet, it isn't clear what accounts and assets exist in their asset values. In a crypto-related company, the detail of the asset accounts can reflect much more interesting insight than a traditional balance sheet. Not all companies will label the accounts on their general ledger in a way that reflects the nature of the holdings, nor will they typically include the full list of accounts on their general ledger in their reporting, making it difficult to know what's held in each category.

Digital asset values should be taken in light of their relative risk to traditional reserve currencies. Regardless of your belief in digital assets, historical volatility and fiat denominated costs require conservatism: it's recommended to always calculate runway with fiat first. However, a company's strength, or lack thereof, is definitely not fully reflected with the current treatment of GAAP. Investors have often asked crypto companies informally for a treasury statement, or a fourth financial statement – the fair value of everything in your treasury, including all liquid and non-liquid digital assets – which is similar in spirit and intent to the SoDA.

An industry standard, like the SoDA, that could be added as part of the normal course of financial reporting would be a very valuable best practice for companies to adopt and investors to require.

## **Auditability**

Auditability of the digital asset holdings and activity of an organization is a significant and straightforward benefit to a company or organization that makes use of SoDA and related reporting. By “auditability,” we mean an auditor's ability to provide a clean opinion on the relevant financial statements after obtaining reasonable assurance that the financial statements are free of material misstatement.

To better understand the benefit though, we need to understand that one of the biggest challenges to the audits of companies in the digital asset sector is the inability to gain visibility into the audit client's on-chain balances and activity. On-chain activity comes in many forms, but depending on which blockchains, smart contracts, and digital assets are relevant, and what type of activity is involved, an auditor's ability to obtain and test these balances and activity can be significantly complicated. This complexity is true for both on-chain activity which the client controls themselves and also for activity the client has engaged a third party to do in its stead.

Of course an auditor itself will need to have developed the competency, methodology, and tooling to independently confirm a client's material activity, but if the client is not itself able to capture this data, then there is little hope for an auditor to validate it in the course of a typical external audit.

The benefit to auditability, then, is that any entity with the ability to reconcile and record their on-chain balances and activity via their wallets, asset holdings, and asset use/purposes as mapped out by SoDA will have, by evidence of that effort, shown to have developed the internal processes of sufficient rigor to support third-party review. And these more granular internal processes will more readily admit of being documented and controlled. Specifically, it is these internal processes – as they relate to financial reporting – that are precisely the measures which fall within the scope of a financial statement audit. The better these processes are designed, documented, and paired with controls that mitigate the risk of these processes failing, the more easily that an entity's financial statements may be audited.

The expanding world of digital assets has introduced an array of complexities to tax planning and return preparation. For tax accountants serving the crypto industry, gaining deeper insights into digital asset transactions is not just beneficial—it's pivotal.

Tax accountants need certain fundamental data points to perform the calculations necessary for income tax purposes. As currently structured, not all crypto transactions are taxable. A transfer of crypto from one user-held wallet to another does not trigger a taxable event, whereas selling crypto for fiat, exchanging one token for another, or receiving crypto as payment or rewards does. A source of truth is needed to validate these transactions and provide visibility into the details needed for what can be complex calculations. SoDA and its related reporting present the structure and insights that tax accountants need to differentiate between taxable and non-taxable events more easily, as well as to determine the cost basis of a digital asset sale or exchange. This is essential for calculating both realized and unrealized gains or losses.

Central to SoDA's presentation is the aggregation of period over period transactions by token. As a tax accountant, we can use this to plan for the tax consequences of planned or executed transactions, as well as delve into potential tax loss harvesting or other sophisticated strategies.

We know that digital assets can generate income in various forms, including staking rewards, mining income, interest from decentralized finance (DeFi) platforms, and airdrops. Transparency into these streams, in an organized manner, helps to ensure they are reported correctly, as each transaction type may have different tax implications.

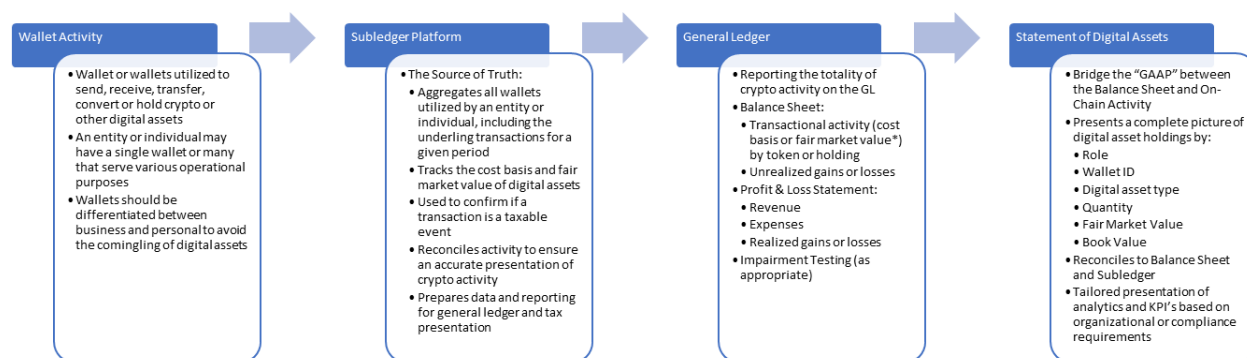
With these advanced insights provided by SoDA, tax accountants can strategize better. Whether it's optimizing the timing of dispositions, harvesting losses to offset gains, or planning for potential future tax rule changes, data-driven insights from SoDA can lead to more informed decisions. Such insights empower tax accountants to offer value-added services, ensuring accurate tax return preparation while navigating the intricacies of the crypto world confidently.

## VI. Additional Considerations

### The Process of Building a Statement of Digital Assets

The number of businesses that operate with digital currencies and digital assets is increasing at a noticeable rate as these instruments move into more parts of finance, trade, and commerce. Businesses are using crypto in a number of ways including receiving and/or distributing digital currencies or assets in the process of generating revenues, obtaining investment, receiving or providing loans, paying for cost of sales, payroll or operating expenses, purchasing assets, and most other uses of traditional currencies and assets. These businesses may also mint native tokens, putting some in circulation and holding others in reserve.

It is the finance team's responsibility to manage and close the books, evaluate the performance of the business, determine and record tax exposures, manage the treasury, and perform financial planning and analysis functions. The finance team will need to effectively communicate the balances and analytics related to these digital assets to management, investors, tax partners, auditors, and numerous other internal and external parties. These tasks can be accomplished via a multi-step process, an example of which is summarized here, the sum of which can result in a well-qualified Statement of Digital Assets.



#### **Wallet Activity**

Creation of an accurate Statement of Digital Assets starts with the wallets of an organization or individual. These wallets are utilized to send, receive, transfer, convert, and/or hold the digital assets of that organization. An entity may have a single wallet or multiple wallets which serve unique organizational purposes. Maintaining proper wallet hygiene – which is the understanding of and related documentation detailing the uses of each wallet and its underlying transactional activity – is one of the first steps in preparation of the Statement of Digital Assets. This step is also key to determining that there are no commingling of digital assets between the organization and any outside/non-related parties.

#### **Subledger Platform**

A critical second step is to record and make sense of any and all digital transactions and account balances. A crucial tool in this area is the use of a crypto-focused subledger that can perform the bulk of the data collection, aggregation, and organization of all on-chain and offchain activity. The subledger acts as an aggregator of wallet activity and allows for the tracking of cost basis for acquired digital assets,

arriving at the fair market values of digital assets at a given point in time, and reconciling and tagging digital asset activity, along with pushing this activity and resulting balances to the general ledger. The subledger can also provide operational data and tax reporting for internal or external use.

### ***General Ledger***

Once reconciled, digital asset activity can be pushed from the subledger to the general ledger. This data upload may be in batches or at the transactional detail level depending on the needs or requirements of the platform or organization on a case-by-case basis, but should represent a totality of digital asset activity for a given period of time. If transactions are tagged and recorded properly in subledger, then the Balance Sheet should represent the current balance of digital asset holdings in compliance with Generally Accepted Accounting Principles as well as any unrealized gains or losses. Any revenue, expense or realized gains or losses should also be represented on the Profit & Loss Statement. Impairment testing may be required as determined by financial reporting regulations.

### ***Statement of Digital Assets***

Data from the subledger and the general ledger will be utilized in order to populate the Statement of Digital Assets. This combined output allows for a complete picture of digital asset balances and activity for the reporting period and bridges the “GAAP” between the Balance Sheet and on-chain activity. Said another way, it is a common sense approach to how the balances presented on the GAAP-basis Balance Sheet tie to wallet holdings and activity.

On the Statement of Digital Assets, digital assets are organized by wallet, asset type, and role. The quantity of tokens, fair market value and book value for the period are presented and the book value is reconciled back to the Balance Sheet. Based on this presentation, other key performance indicators including unrealized gains or losses, portfolio holdings by token, summary by role, yield, liquidity, and tax scenario analysis may be tailored.

The breakdown by wallet, asset, and role lets the finance team clearly visualize the full 'build'. It also enables a non-accountant to reconcile and effectively bridge what is on the balance sheet from a GAAP perspective with what exists on-chain, ultimately answering the question – how do we properly report a more complete picture of the digital assets on the balance sheet.

## VII. Conclusion

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Crypto is evolving at a breathtaking pace, and such a pace can not help but create new challenges. Accounting for crypto activity has left businesses and organizations that interact with digital assets with the challenge of fitting the square peg of digital assets into the round hole of traditional financial reporting. The inadequacies of current GAAP practices in capturing the essence of digital assets have left stakeholders navigating a foggy terrain, and face even more complexity when it comes to reporting as accounting guidelines gain clarity.

The Statement of Digital Assets (SoDA) – is attempting to be a beacon of clarity in this mist. SoDA's primary mission, as we've explored, is to bridge the chasm between on-chain activities and GAAP balance sheet reporting. By providing a transparent lens through which to view digital assets, SoDA demystifies the often-opaque balance sheets, offering stakeholders a clear picture of a firm's liquidity and digital asset holdings.

A pivotal takeaway from our exploration is the nuanced distinction between book value and fair market value. This distinction, while seemingly technical, holds profound implications for how businesses perceive and report their digital assets. With potential shifts on the horizon for digital asset reporting guidelines, SoDA's relevance is underscored, poised to adapt and serve as a consistent guidepost.

Looking ahead, the implications of SoDA extend beyond mere reporting. As digital assets continue to permeate various sectors and redefine traditional business operations, tools like SoDA will play a crucial role in shaping the financial narratives of the future. It's not just about accurate reporting; it's about fostering trust, transparency, and understanding in a digital age.

In closing, we urge businesses, financial aficionados, and all stakeholders in the digital asset ecosystem to embrace the SoDA framework. Its collaborative genesis speaks to its universal appeal and potential. As we stand at the crossroads of traditional finance and digital innovation, let SoDA light the way forward, ensuring that the financial stories we tell are clear, accurate, and illuminating.

This white paper represents the beginning of a journey and not a final destination. We want to hear from the crypto accounting and finance community... What are your thoughts and comments? More importantly, would you be willing to endorse this white paper to help create a best practice for the industry?

We look forward to hearing from you at: [whitepaper@sodafinance.xyz](mailto:whitepaper@sodafinance.xyz)