



BITWAVE

The Enterprise Digital  
Asset Maturity Model



# Introduction

In 2009 an anonymous activist published a 9 page whitepaper that began a series of earthquakes across the world. Cryptocurrencies, and digital assets, are the largest groundshift to happen in the financial industry since banks first adopted computers, but the prospect of bringing digital assets onto your balance sheet, and into your business process, can be daunting for any organization or any CFO.

The Digital Asset Maturity Model developed by Bitwave is a set of stages and guides that your organization can use to judge your adeptness with Digital Assets, and plan out not just your adoption of these new assets, but also envisage how your business can begin to benefit and change from this new technology. With Bitwave as your guide, not only can the digital asset world be approachable, but enormous new business value can be unlocked.

## THE OPPORTUNITY OF DIGITAL ASSETS

Digital Assets and cryptocurrency have been dubbed programmable money, and that really is what is so groundbreaking about them. For the first time, instead of having to rely on banks for complex financial instruments, you and your organization can directly interact with financial assets, create complex instruments, transactions, and more. **Today** a business could convert part of their holdings to Ethereum, create a smart contract to pay employees with that Ethereum, borrow stablecoins against that smart contract to cover payroll at paper market rates, and even design complex business rules around supply chain delivery schedules.

In the same way that it was hard to imagine virtual reality and the internet when the transistor was first discovered, we're only now beginning to see the deep power of programmable money.

## WHAT'S SO HARD ABOUT DIGITAL ASSETS?

When it comes to businesses using digital assets, a few challenges stand out. First, accounting and tax for digital assets is incredibly complicated - every cryptocurrency revenue or expense transaction is both an accountable event and a taxable event. It both needs to get onto your general ledger, and get integrated with your business tax processes and tracked for gain / loss. This isn't a problem you need to solve day one, but your business needs a plan and a set of steps to move from digital asset novices to experts.



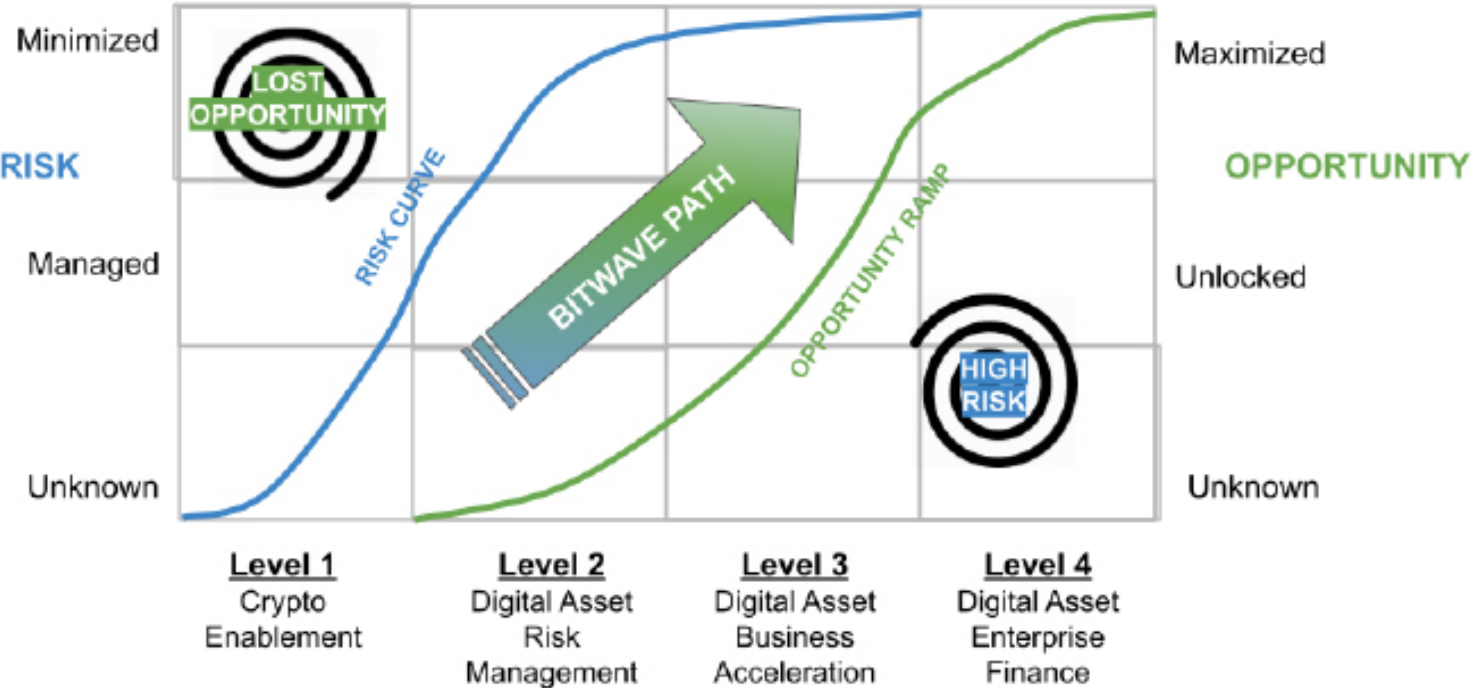
In addition to the tax and accounting problem, the way digital assets are stored and transferred is fundamentally different than traditional assets. For instance, some banks require board approval just to create a bank account, but creating a new wallet for ethereum takes less than a second. There are around 150 foreign currencies in existence, there are already 200k digital asset tokens (and counting). Dealing with monitoring your organization's wallets, pricing your assets, and more is a daunting challenge.

## THE DIGITAL ASSET MATURITY MODEL

Bitwave developed the Digital Asset Maturity Model in consultation with our most forward looking customers to help them plan their own digital asset adoption, and gauge where they themselves are on the adoption path.

The model consists of four levels, starting from Level 1 where you are holding a very small amount of crypto in a small number of wallets, continuing to Level 2 where you are monitoring more assets across more wallets, and beginning to incorporate digital assets into your business process, to Level 3 where digital assets are prolific at your organization and a robust part of your treasury holdings and even business strategy, culminating in Level 4 where you are actually earning yield on assets, investing in tokens, and taking more direct control of your corporate finances through Decentralized Finance.

Digital Asset Maturity Model



# Level 1:

## Crypto Enablement

The day has come, and your business owns cryptocurrency. Perhaps your CTO had a revolutionary idea about a decentralized marketplace, or your VP of Engineering needs to pay contractors in Argentina with Bitcoin. Regardless of who started you down the path, it has become finance's problem - your organization needs to track these assets, get them on your balance sheet, pay taxes on them, and figure out what to communicate to the board's audit committee. Welcome to the cryptocurrency revolution - it might be a bit scary, but it's the fast approaching future of finance.

### Definition

- Your business is going from no crypto on your balance sheet to an immaterial amount
- You have a limited number of wallets (hopefully only one or two)
- You have a constrained number of people that will be allowed to transact in crypto and who will be responsible for providing details regarding any given crypto transaction.

### Challenges

- Unfamiliarity with cryptocurrency and how it works
- No institutional knowledge about how to treat crypto from a tax and accounting standpoint.
- Lack of institutional discipline around securely storing and bookkeeping cryptocurrency.
- Lack of organizational understanding that a cryptocurrency transaction is both an accountable transaction (i.e. it must eventually reach your general ledger) and a taxable transaction (i.e. there are tax implications for almost every crypto transaction).

### Goals (Checklist)

- A full workflow for accounting for cryptocurrencies, accurately reporting them on your balance sheet, and a documented process to close your cryptocurrency books on a monthly basis.
- A core team trained on cryptocurrencies and cryptocurrency tax / accounting.
- A dashboard for monitoring crypto holdings across your organization.



## Level 2:

# Digital Asset Risk Management

Now things are getting fun! Your organization has proven that crypto can streamline internal processes, make you more competitive in the market, and otherwise enhance your business. At this point, you're prepared to move on from one or two wallets controlled by the CTO to wallets spread across your organization with many developers, workers, or even sales people all actively using digital assets.

### Definition

- You have tens to hundreds of wallets
- Many different people can spend or receive digital assets
- Your digital asset holdings are no longer immaterial
- Digital assets are a major part of your business (for instance, sales are coming through in crypto, you are paying a large number of contractors in crypto, etc).

### Challenges

- At this scale, doing the book-keeping as an individual requesting transaction information from people becomes burdensome, and new ways of gathering information are required.
- You may be invoicing or paying bills with crypto, and this needs to be handled correctly from an accounting and tax perspective, as well as integrated nicely with your existing AR / AP processes.
- The number of wallets and the types of tokens being held by the company tend to rapidly increase during this time - your business must develop processes to discover new wallets, assign owners to those wallets, and ensure accounting and tax compliance across all corporate assets.

### Goals (Checklist)

- A clear, documented process for anyone using digital assets at your organization to report new wallets (or for your finance team to automatically discover new wallets)
- Rules configured for categorizing large volumes of transactions
- A proactive model to gather digital asset transaction information from wallet users which are not covered by rules
- A well documented naming scheme for organizational wallets to be used in reporting and analytics
- Alerts configured to monitor wallets for unapproved transaction types, for instance trades on Decentralized Exchanges (DEXes)..



## Level 3:

# Digital Asset Business Acceleration

At this level, digital assets have become a core part of your business, you may even recognize some, or all, of your revenue from tokens or stable coins. At this point, you can begin to really take advantage of the dream of programmable money. The term NFT has begun to enter your company jargon, and you're learning it's about more than just online art.

Definition	Challenges	Goals (Checklist)
<ul style="list-style-type: none"> <li>You are deploying smart contracts for business relationships - streaming payroll to employees, invoicing and paying bills on-chain, or using partner and customs linked supply chain contracts.</li> <li>You are issuing or acquiring NFTs for intangible assets within your business, and potentially monetizing their transfer through commissions.</li> <li>You've moved to blockchains and adopted tokens that best suit your business.</li> <li>You are running your own mining or staking nodes.</li> <li>You have automated processes executing transactions on the blockchain.</li> <li>Every employee may have some sort of digital wallet.</li> </ul>	<ul style="list-style-type: none"> <li>Recognizing streaming income and expense is a completely unique and unfolding area within accounting and tax disciplines.</li> <li>NFT management is a completely new discipline compared to tracking tokens and coins.</li> <li>With more and more people holding digital assets, just like any other corporate asset, you're going to run into shrinkage.</li> <li>Your transaction volume will reach a level that cannot, under any circumstance, be managed manually</li> <li>The more smart contracts you're interacting with or writing, the higher the risk of a token losing bug</li> <li>Every new blockchain you support adds a new source of transaction data</li> </ul>	<ul style="list-style-type: none"> <li>Develop processes and adopt tooling to periodically confirm with your employees that they have access to their wallet's private keys</li> <li>Develop processes and adopt tooling to track NFTs across your organization</li> <li>Enhance your accounting processes with scripts or software to handle the large number of monthly transactions you're now seeing</li> <li>Have developer resources or a vendor relationship that enables you to add support for new blockchains</li> <li>Develop internal resources or vendor relationships to review smart contracts, and adopt strict source code management processes</li> </ul>

## Level 4: Unlock Digital Asset Enterprise

Your company has begun to rewire itself for Enterprise Digital Asset Finance, and it's time to reap the rewards. At this level you are holding substantial amounts of digital assets, frequently paying employees with crypto, and leveraging smart contracts for business processes. But, there's one step left, and that's to ditch your bank. Decentralized Finance is making traditional financial products available to businesses directly, for lower fees and with greater flexibility. Plus, if you can't find the exact product you want, you can just write the contract and build it yourself.

### Definition

- You hold significant funds in digital assets and are beginning to deposit them into DeFi pools and earn returns.
- You frequently trade digital assets on decentralized exchanges, perhaps even running arbitrage bots
- You borrow or lend digital assets, including NFTs, for profit or simply treasury management.
- You provide liquidity for tokens you yourself have minted or hold.

### Challenges

- DeFi is the wild west when it comes to tax and accounting law, and you need experts to advise you on treatments and processes, plus robust monitoring and tracking tooling.
- Interacting with any DeFi protocol entails risk, and it's not always obvious what protocols to trust.
- Compliance concerns may keep you from investing in some protocols, but these concerns are not clearly laid out at this point.

### Goals (Checklist)

- Setup a robust treasury management policy for DeFi including what types of assets and pools you are comfortable engaging in.
- Find and get approved for compliance friendly pools that support KYC and AML
- With your tax and accounting advisors determine tax and accounting treatment for liquidity pools, lending and borrowing pool, token wrapping / unwrapping, etc.
- Setup robust monitoring of your various held DeFi assets and clearly communicate a DeFi policy
- Setup processes to properly recognize, account for, and track taxes on yield earned or interest accrued.

