

Executive Summary

Digital assets are no longer a niche interest limited to technology firms and early adopters. Average citizens, small businesses, and governments are creating, buying, and selling digital assets – as are criminals.

This has profound implications for federal missions. As economic value is increasingly digitized and tokenized, federal agencies must rapidly mature their knowledge and capabilities to analyze, forecast, regulate, and facilitate digital asset activity.

For agency leaders seeking to define a digital assets strategy, a maturity model can help assess current capabilities, articulate a vision, and map the path to achieve that vision.

Much like the well-known Capability Maturity Model Integration (CMMI) process, the **Accenture Federal Services Digital Assets Maturity Model** provides a framework for high-quality, repeatable results. It defines levels against which agency leaders can measure the maturity of a digital assets function, including people and culture, methods and processes, and technology.

The model also provides an approach for defining, standardizing, and documenting digital assets knowledge, skills, and technology – one that ensures constant alignment with the mission, even as it evolves.

By employing the digital assets maturity model to support the centralization and evolution of data, tools, people, and processes, agencies can manage today's demands – and position themselves to adapt as financial innovations evolve.

Ultimately, digital assets maturity empowers agencies to build trust among and better serve citizens and regulated industry – through thoughtful enforcement actions and policies that safeguard and energize our national economy, protect our privacy, and steward our energy resources and environment.

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Federal agencies face rapidly multiplying challenges associated with the rise of digital assets.

Since the crypto winter of 2022, the market for digital assets has resurged dramatically. Multiple spot bitcoin exchange traded products (ETPs) have attracted billions of dollars of investment. Sales and price points for nonfungible tokens (NFTs) and other digital collectibles have resumed an upward trend. And Shopify, the largest e-commerce platform, recently integrated a blockchain payment option.

Clearly, digital assets are no longer a niche interest limited to technology firms and early adopters. Today, average citizens, small businesses, and governments are creating, buying, and selling digital assets – as are criminals.

In response to these trends, the investigative functions within financial regulatory and law enforcement agencies began developing fluency and capabilities in digital assets. Today, however, decentralized finance (DeFi) and blockchain are encroaching into non-investigative functions – including rulemaking, policy and guidance, and communications. Indeed, the profound implications of digital asset technologies have reached national security missions, as well as energy, the environment, and other civilian sectors.

At the same time, agencies also face the challenge of continuous market innovation. As of 2024 there are more than 1,000 distinct blockchains⁶ and more than 9,000 active digital assets – including meme coins, stablecoins, and utility and governance tokens.⁷ And analytical tools have evolved from niche software and static data downloads to enterprise solutions capable of extracting, transforming, and analyzing transactional data in real time.

Together, the adoption and innovation in digital assets make it imperative for agency leaders to make strategic investments. Meeting these challenges requires not only better data and enterprise tooling, but also in-house knowledge and skills and well-defined, holistic, and scalable processes. To align investments on goals and minimize risk, agencies need a comprehensive approach for identifying and assessing where they are today.

Put simply, the federal government needs a maturity model for digital assets.

1 Crypto Trading Hits Busiest Pace Since June 2022. CoinDesk. Feb 7, 2024.

2 <u>Bitcoin ETF Flow.</u> Farside Investors. May 15, 2024.

NFT trading volume nears \$1B as markets turn bullish. CoinTelegraph. Dec 8, 2023

Shopify integrates with 'zero-fee' Solana Pay, prompting businesses to adopt crypto transactions. CryptoSlate. Aug 23, 2023.

Statement from U.S. Secretary of Commerce Gina M. Raimondo on Responsible Advancement of U.S. Competitiveness in Digital Assets Report Release. U.S. Department of Commerce. Sep 16, 2022.

How Many Blockchains Are There: Unveiling the Ecosystem's Diversity. Coinpaper. Jan 5, 2024.

Number of cryptocurrencies worldwide from 2013 to January 2024. Statista. Jan 9, 2024.

...sustained U.S.
leadership in technological research and development will be key to ensuring future U.S. competitiveness in digital assets and beyond."

~ U.S. Secretary of Commerce Gina M. Raimondo ⁵



Digital assets dominate key federal missions

For agencies with financial oversight and enforcement responsibilities, the explosive adoption of digital assets by businesses, investors, consumers, and criminals has significantly disrupted operations.

Financial examinations, tax investigations, and fraud litigations have grown dramatically more complex, and crypto assets are triggering spikes in consumer complaints and caseloads. For example:

The Federal Trade Commission (FTC) reported that 28 percent of dollars lost to fraud in 2023 was due to cryptocurrency scams.9

The Internal Revenue Service (IRS) estimated that it would receive 8 billion 1099-DA forms per year from digital asset brokers – double what it receives for every other Form 1099 combined. 10

During FY 2023, the Commodity Futures Trading Commission (CFTC) brought 47 actions involving digital asset commodities, setting an agency record and representing nearly half their caseload.¹¹

In addition to investigative caseloads, agencies also face increased demand for public education via channels such as the Securities and Exchange Commission's (SEC's) Investor.gov¹² and Financial Crimes Enforcement Network (FinCEN) alerts.¹³

To better manage the dramatic surge in demand, multiple financial regulatory agencies requested significant budget and personnel increases to enable more effective oversight of the digital assets sector.¹⁴

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This prosecution—the first involving the manipulation of cryptocurrency through openmarket trades—demonstrates the Criminal Division's commitment to protecting U.S. financial markets and holding wrongdoers accountable, no matter what mechanism they use to commit manipulation and fraud."

- Principal Deputy Assistant Attorney General Nicole M. Argentieri ⁸



Man Convicted for \$110M Cryptocurrency Scheme. U.S. Justice Department. Apr 18, 2024.

Consumer Sentinel Network Data Book 2023. Federal Trade Commission. Feb 2024

President's Budget, Fiscal Year 2025. CFTC. Mar 2024.

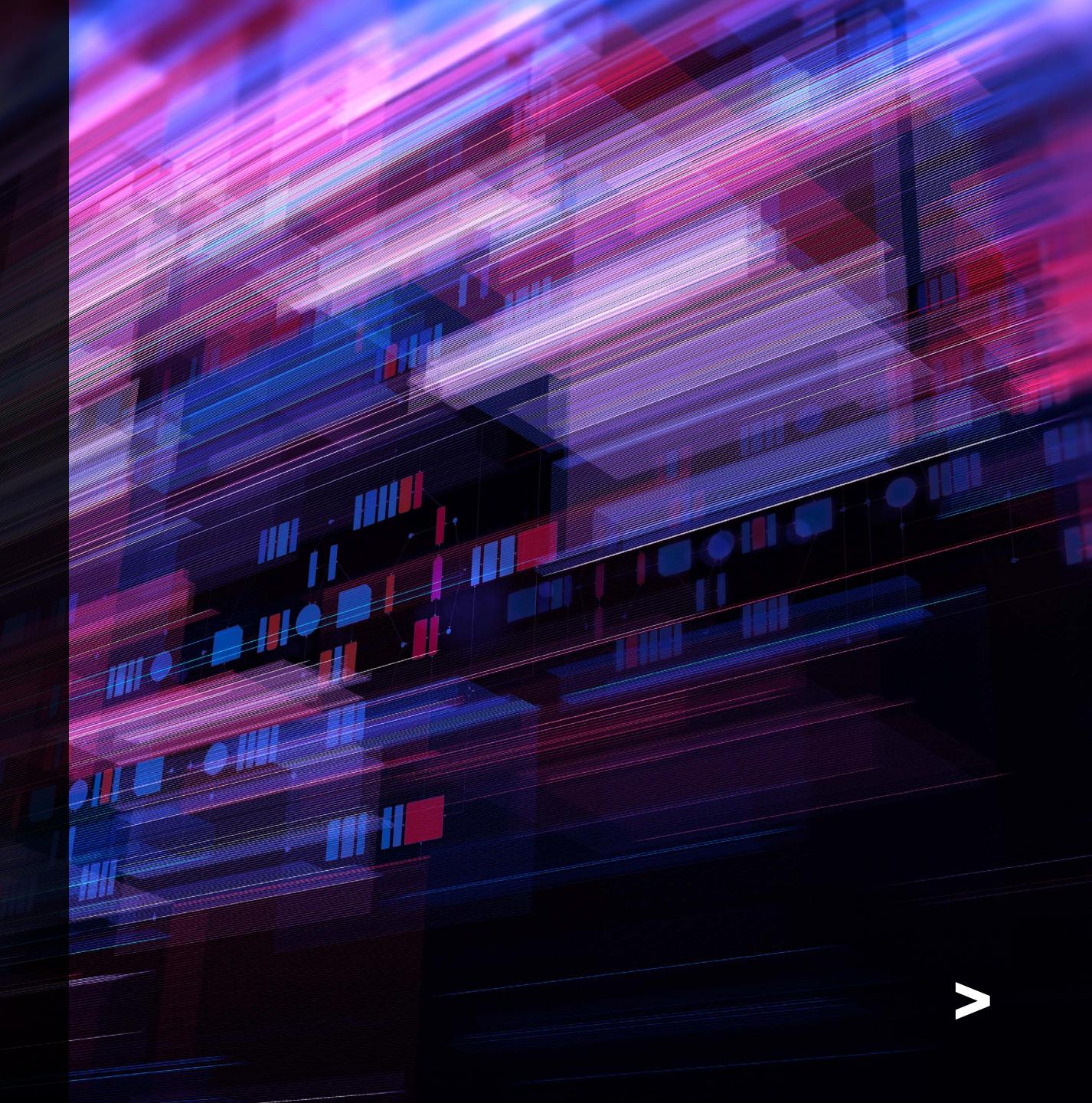
^{12 &}lt;u>Crypto Assets.</u> Investor.gov.

^{13 &}lt;u>FinCEN Issues Alert on Prevalent Virtual Currency Investment Scam Commonly Known as "Pig Butchering."</u> FinCEN. Sep 8, 2023.

^{14 &}lt;u>U.S. SEC Asking for More Millions, Dozens of Lawyers to Beef Up Crypto Oversight.</u> CoinDesk. Mar 22, 2024.

The pressure to build digital asset capabilities is no longer limited to regulatory and investigatory missions. In recent years, the need to understand and analyze digital assets has begun to permeate the whole of government. Agencies that lead U.S. economic strategy must fold opportunities and risks associated with digital assets into decisions that affect our national interest. Under a 2022 Executive Order, more than 17 agencies are jointly exploring the possibility of establishing a U.S. Central Bank Digital Currency (CBDC) to accelerate and lower the cost of cross-border payments and understand the implications of digital assets on economic growth and national security.¹⁵

For these mission leaders, the need for mature processes and workflows has reached an acute stage. As economic value is increasingly digitized and tokenized, federal agencies must rapidly mature their knowledge and capabilities to analyze, forecast, regulate, and facilitate digital asset activity.



Agencies need integrated, scalable data and tools

Early solutions for tracking and tracing digital assets tended to be one-off data vendors and software-as-a-service (SaaS) offerings with niche capabilities. The resulting toolsets were – and many still are – fragmented, difficult or impossible to integrate, noncompliant with FedRAMP and other federal standards, and lacking consulting support.

These approaches leave agencies struggling to keep up with even predictable events in the digital assets market such as the launch of new blockchain platforms and smart contract applications, let alone the universe of potential surprises in consumer behavior, institutional adoption, international policy, domestic legal developments, and more. Moreover, tools optimized for small teams of analysts cannot serve the hundreds – if not thousands – of agency staff whose roles increasingly depend on digital asset insights.

With multiple expensive licenses to maintain, agencies face significant cost and procurement burdens for tools not always tailored to their mission and incapable of scale.



For faster and more accurate insights, some agencies have turned to enterprise-scale Application Programming Interfaces (APIs) that allow for programmatic access to blockchain data. With the advent of enterprise-scale APIs and node engines, agencies have an opportunity to reduce licensing costs, federate access, and dramatically improve cybersecurity compliance. Equally important, these advanced solutions greatly accelerate the analytical pipeline by extracting data in near real-time.

Evolution of federal technology capabilities in digital assets

SaaS Model

Niche tools
High costs
Delayed insights
No scalability

API Model

Blockchain data feeds
Consolidated costs
Faster insights
Some scalability

In-house Model

Direct node access

Reduced costs

Real-time insights

Enterprise scalability

Greater control & transparency

Not surprisingly, financial regulatory and law enforcement agencies are among the first to begin exploring and sourcing enterprise solutions. While this is a vital step toward modern digital assets capabilities, the focus remains limited to data and tools.

To solve for today's needs and prepare for tomorrow's, the road to digital asset maturity must account for much more.

¹⁶ Treasury IRS RFI: Digital Asset Marketplace Analysis. Jun 15, 2023. Contract Opportunity: Distributed Ledger Technology Environment.
FDIC. Apr 28, 2023. Contract Award: Blockchain and Digital Asset Data Support. SEC. Oct 1, 2020. RFI: Subscription to Blockchain Intelligence Data Aggregation.
Department of Treasury. Apr 11, 2023.

Consolidating and growing digital asset knowledge, skills, and processes

Alongside investments in data and analytical tools, some agencies have also begun to develop and organize the supporting capabilities – knowledge, skills, and processes – that it takes to manage and deliver digital asset insights at scale.

Initially, most began by identifying isolated subject matter experts. In recent years, federal leaders whose organizations were most impacted by the rise of digital assets consolidated these experts into working groups and formalized them into dedicated offices.

These are important milestones. However, even agencies on the vanguard of formalizing their digital asset functions have significant opportunities to grow, standardize, and scale capabilities across the federal enterprise.

The path to maturity for key federal agencies

Publicly released milestones provide insight into the evolution in digital assets maturity underway across the federal government.

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2018 / SEC launches FinHub
2020 / SEC elevates FinHub as standalone office
2021 / FinCEN creates position for Chief Digital Currency Advisor
2022 / Justice Department announces National Cryptocurrency Enforcement Team
2022 / White House issues Executive Order 14067 on the responsible development of digital assets
2022 / CFTC creates Office of Technology Innovation
2022 / IRS stands up Digital Asset Initiative Project Office
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Defining a digital assets maturity model

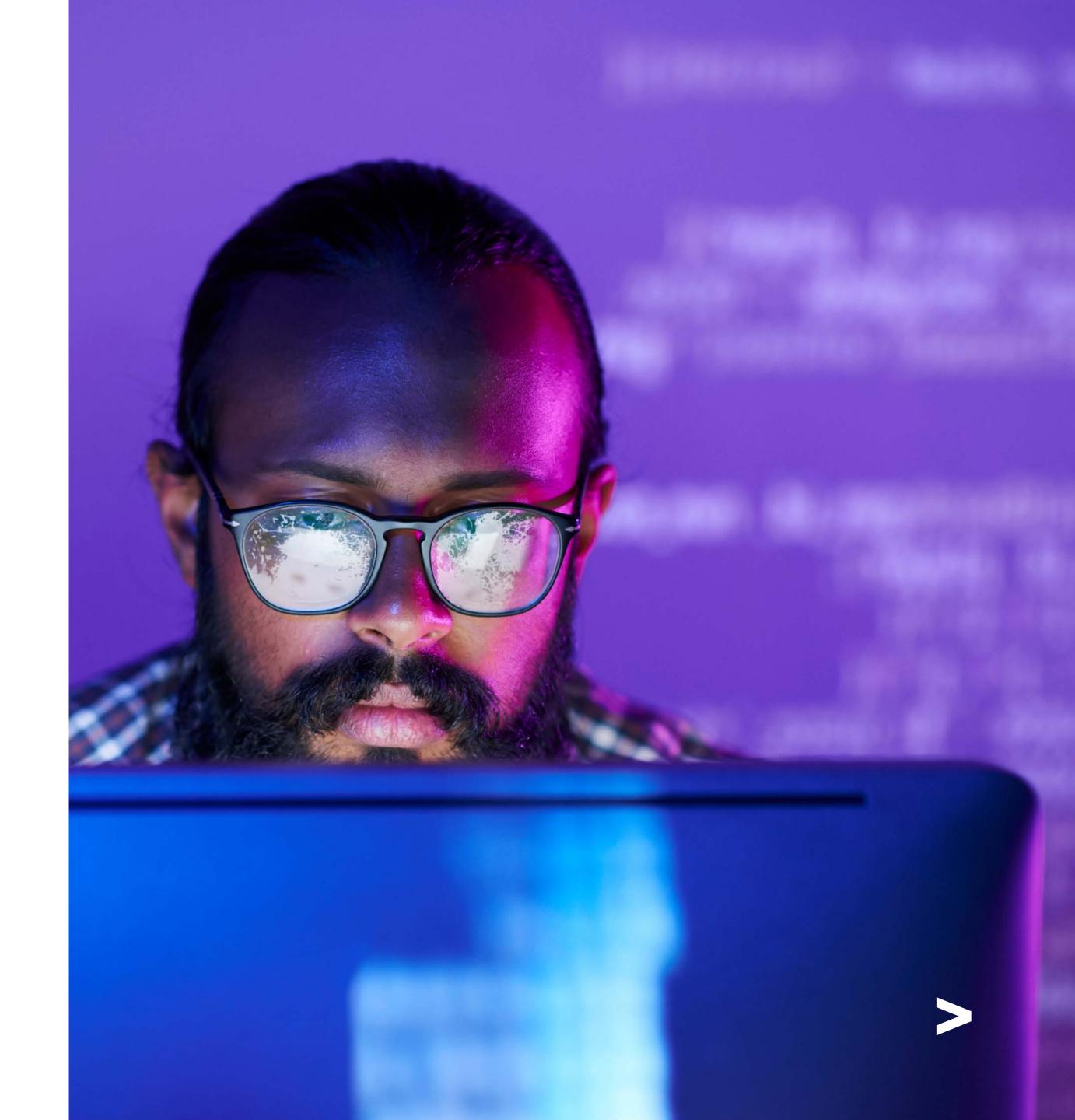
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The Accenture Federal Services Digital Assets Maturity Model provides a framework for success that helps agencies build out the knowledge and capabilities required to meet their mission.

That evolution will necessarily vary based on the agency's starting point, and it can and should adjust alongside the market and threats. Depending on how an agency's mission is impacted by digital assets, full optimization may not be necessary. Rather, agencies may best serve their mission by taking a targeted approach, pursuing maturity in selective areas. By adhering to the framework, agency leaders can keep pace with advancements in technology and the sophistication of bad actors.

In applying the digital assets maturity model, agencies can map out a vision and path to further modernize and grow their digital assets capabilities – creating an in-house fintech innovation function with built-in agility.



A maturity model for digital assets

Most federal agencies are in the early "developing" stage.

EMERGING

Characterized as reactionary with poorly defined, manually intensive processes and lack of strategic vision for digital assets.

- Lack tools, data, and training to manage demand; processes are ad hoc and reactive
- Investigation backlog growing faster than organization can work down
- Lack an engagement channel and communications strategy
- Lack a clear mission and mandate for digital assets

DEVELOPING

Starting to establish baseline processes and automation to enable continuous improvement and meet defined mission.

- Have baseline datasets, tracing methods, and triage processes
- Repeating some tracing or analysis
- Maintaining investigation backlog; working down tasks as they come in
- Have some data and tools available for staff
- Lack plan to respond to FOIA/other requests
- Have a mandate for mission and goals related to digital asset activities
- Are a known resource in digital assets within agency

ADVANCING

Shifting to proactive culture and processes, with cross-agency coordination and ability to adopt tools/data as needed.

- Processes are well defined and proactive
- Actively monitoring and identifying new technology and market trends
- Able to procure data and tools when needed
- Leveraging tools to automate some tracing and administrative tasks
- Able to triage cases based on a framework (e.g., Bitcoin, DeFi, scams)
- Finding common use cases and patterns across investigations
- Effectively coordinating among agency stakeholders
- Responding to FOIA/other requests without burden to staff
- Staff are included in workflows of other divisions as subject matter experts

OPTIMIZED

Industry leader focused on optimization, leveraging advanced technology and crossagency integration to operate at scale.

- Leveraging AI and other new technologies to automate business and analysis processes
- Procuring data and tools based on proactive trend identification; keeping up with industry change
- Effectively triaging cases, making closing or filings timelines more predictable
- Staff across the agency have the necessary data and tools to conduct analysis and investigations
- Producing analysis and reports that are frequently used across the agency
- Coordinating internally and externally with other agencies and stakeholders
- Responding to public and governmental requests without burden to staff
- Regularly recognized across the agency and government as digital asset experts

MATURITY LEVEI

The federal digital assets function of the future

Effectively managing the demand for digital assets insights to support investigations, policy, rulemaking, or other mission needs no longer hinges solely on data and technology. Certainly, data, tools, and technical skills remain critical, but without robust and repeatable methodologies and centralized processes, agencies simply cannot keep pace.

The digital assets or fintech innovation function of the future is a hub that centralizes, integrates and coordinates:



Data from external and internal sources



Centralized and integrated tools



Internal and consultant expertise



Analytics processes and functions



People and skills, including training and recruiting



External trend scanning



Intra-agency collaboration

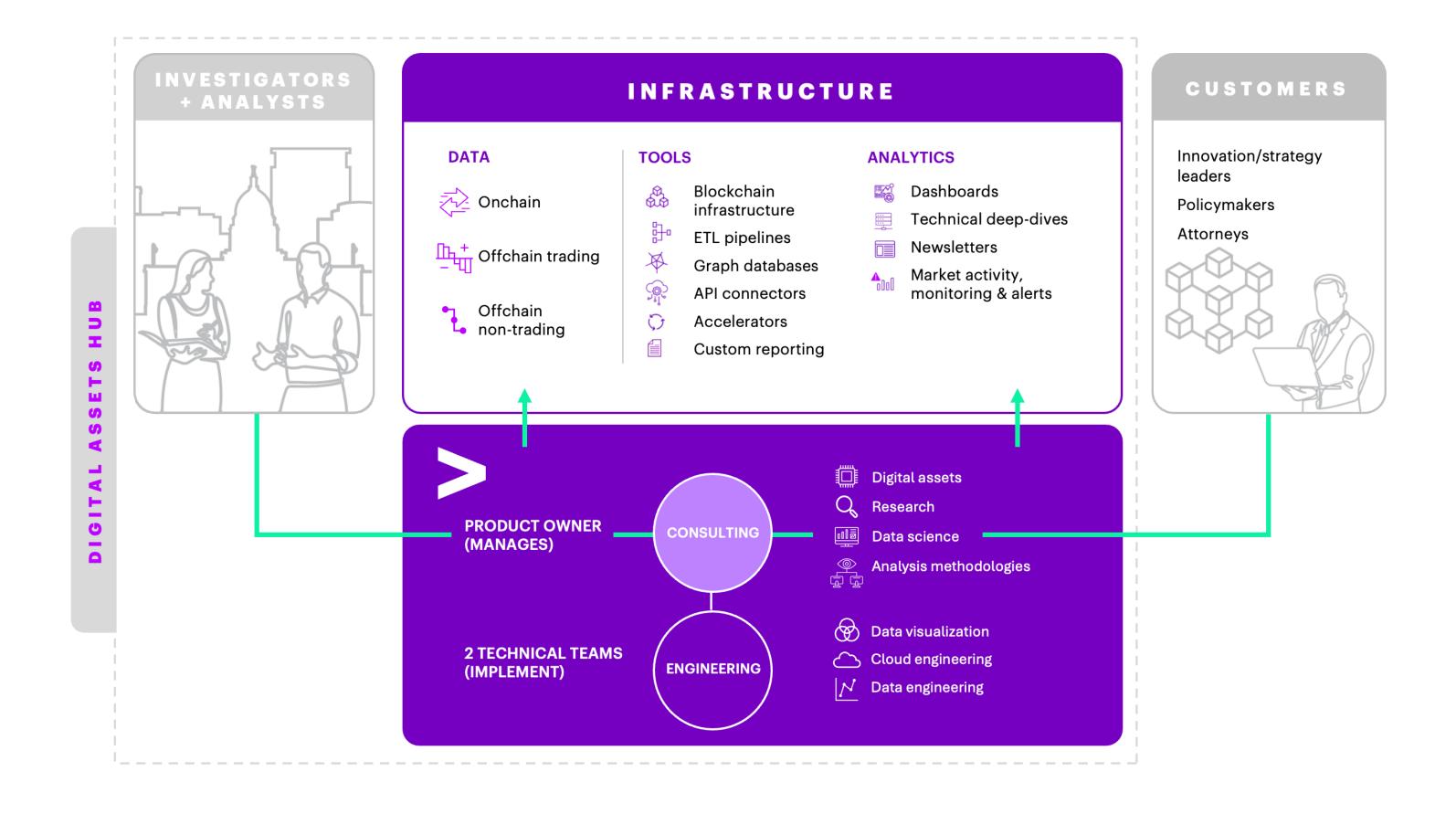


Internal and external



Anatomy of a digital assets hub

A mature digital assets hub powers the agency's in-house subject matter experts (SMEs), advising leaders, investigators, attorneys, and others on best practices and market and technology trends that affect the agency's mission.



Key benefits of a digital assets hub

More data sources, greater flexibility, and easier integration with APIs

Reduced licensing costs through use of open-source data

Accelerated insights and simpler queries for technical and nontechnical users through cloud tech, AI, and data visualization

Greater agility to support continuous improvement through automation and rapid prototyping of new use cases

Centralization of digital asset information and knowledge for entire agency.

Represents a baseline that all divisions should start from



Building a digital assets hub

The process of establishing a digital assets hub begins by applying the digital assets maturity model to assess an agency's data, analytical tools and skills, and processes. An organizational scan will uncover pockets of digital assets activity, informal working groups, or agency staff members with a particular interest or acumen. From there, a trend analysis can identify how – and to what extent – the continued evolution of digital assets will impact the agency's mission and functions.

Together, the maturity assessment and trend insights enable agency leaders to envision how a digital assets hub can best serve the agency as a whole. This vision, in turn, supports the definition of strategies for data, tools, training, and communications.

Immediate value can be realized through concentrated and mission-centric efforts to educate and upskill leaders and teams on the digital assets industry – that is, focused on how digital assets impact the agency. For most agencies, innovation, enforcement, and policymaking provide the strongest business case for the budget requests to acquire real-time data, advanced tools, and/or human capital.

The hub model is ideal for integrating trusted partners to support strategy, planning, and ongoing engagement with digital assets, including:

Horizon scanning and trend analysis

Market and industry monitoring

Data analysis

Information synthesis to forecast mission impacts

Rapid prototyping

Support for cross-agency initiatives and collaborations

Assessing maturity: key questions for agency leaders

The first step toward digital asset maturity is understanding where your agency is today. Here are five key dimensions and questions to help leaders begin to map their current level:

Data and tools – Does the agency have a centralized repository of resources and license management for staff?

Training – Do staff members have access to agency-specific eLearning focused on the impact of digital assets on the mission and regulations?

Industry engagement – Does the digital asset organization have a standing forum for two-way communication with industry?

Regulatory harmony – Does the digital asset organization have a standing forum or memorandum of understanding with other agencies to enable information sharing and collaboration?

Subject matter advisory – Does the agency have a central group of digital asset SMEs to provide input and feedback to staff across its divisions?



Empowering innovation offices for tomorrow's emerging technologies

Federal agencies are already facing high demand for digital asset insights across the enterprise. These demands are growing rapidly in quantity and complexity. Given that digital assets exchange-traded funds (ETFs) are among the fastest-growing financial products ever,¹⁷ that demand will continue to multiply.

The market drivers could not be more urgent. Already, consumers and businesses have adopted digital assets faster than any other technology except social media and generative AI. Digital assets experts are watching a broad range of market, technology, and adoption trends – such as onchain DeFi trading, new blockchain platforms, and foreign governments adopting Bitcoin as a recognized national currency.¹⁸

Individually or together, such trends could dramatically shift or magnify an agency's need for centralized capabilities and rapid, accurate insights. And if the historic collapse of adoption timelines¹⁹ continues, new digital asset products and services and other financial innovations could take hold faster than Bitcoin.

By employing the digital assets maturity model to support the centralization and evolution of data, tools, people, and processes, agencies can manage today's demands – and position themselves to adapt as financial innovations evolve. With a mature digital assets hub, agencies can build trust among and better serve citizens and regulated industry – through thoughtful enforcement actions and policies that safeguard and energize our national economy, protect our privacy, and steward our energy resources and environment.



¹⁷ BlackRock's \$20 Billion IBIT Becomes The World's Largest Bitcoin ETF. Bitcoin Magazine. May 29, 2024.

^{18 &}lt;u>Digital Assets Trends to Watch in 2024.</u> Accenture Federal Services. Dec 2023.

^{19 &}lt;u>The Pace of Technology Adoption is Speeding Up.</u> Harvard Business Review. Sep 25, 2019.

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