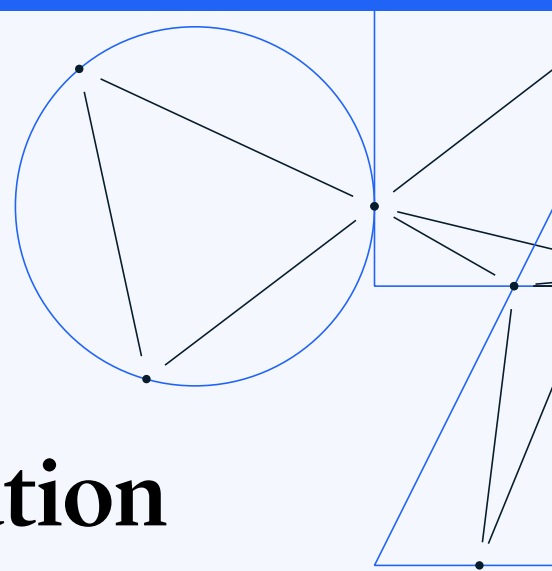## TRM

7 Pillars of Highly Effective Tax Agencies

Pillar 3: Enhancing Automation and Digitization

Crypto assets are the new frontier of taxation. And tax authorities across the globe are just beginning to operationalize and scale crypto asset programs focused on increasing voluntary compliance and identifying noncompliance. In this series, TRM Labs and TaxBit explore seven key pillars or principles tax agencies should keep in mind to help shore up their crypto tax compliance efforts. In this article: data collection and ingestion.

Using data and analytics to operate more effectively

Once a tax authority has aggregated crypto data from a variety of sources, the challenge becomes how to effectively use that immense collection of data points – which could be comprised of thousands or millions of records and taxpayer profiles and transactions.

Although there are many tax authorities worldwide with less sophisticated technological capabilities, those agencies can still achieve effective use of data through a "crawl, walk, run" approach to using [blockchain intelligence](#) and automation. The silver lining for many tax authorities is that they have already begun modernizing their technology infrastructure with automation and digital transformation initiatives, irrespective of crypto – enabling them to become more efficient with resources, enable better customer service, and enhance enforcement capabilities.

For instance, the **IRS** has seen tremendous success through its return-matching [process](#) known as the Automated Under Reporter program. This system matches amounts shown on tax returns to information reported by third parties, generating compliance inquiries where potential discrepancies are identified in reported income.

Since its inception, the IRS has continually expanded the variety of information that can be matched, and upscaled system accuracy through robust parsing of data. In 2022 alone, it resolved over 1.5 million inquiries, resulting in more than USD 8.7 billion in additional tax assessments.

The **Australian Taxation Office** has implemented automated systems across a variety of programs, including specific data-matching processes that identify businesses that may not be reporting all their income, are operating outside of the system, or aren't lodging any returns. Similarly, the **Canadian Revenue Agency** has also [implemented](#) AI algorithms to help identify anomalies and potential indicators of offshore tax evasion among multinational enterprises and high net worth individuals.

Aggregating on and off chain data

Due to the nature of blockchains, tax authorities will need to work with two buckets of information relating to crypto assets: **private off-chain** data and **public on-chain data**.

Tax authorities are adopting various reporting rules that require service providers within the industry to report information about customer crypto activity to tax authorities. This information, however, will only ever show a limited picture of an individual user's activity. The remainder of that activity happens in peer-to-peer, non-intermediated, transactions. These on-chain transactions are publicly available and can be used by tax authorities to gain a more complete picture of an individual's economic activity.

Appropriately implemented, blockchain intelligence augments and enhances existing automated processes — so that tax authorities can begin analyzing noncompliance with crypto assets at scale and build out more holistic pictures of individual's wealth portfolios. The assembly of both off-chain data received by tax authorities from various custodians and intermediaries with on-chain data is the key to success.

Efficiency and scaling

Currently, initial case identification or development for crypto assets often sits with individuals manually reviewing information. While at times useful, manual reviews of wallet addresses and tracing to identify taxable events one-by-one ultimately won't scale on a national level.

Consider, for example, a tax examiner who uncovers a private wallet address in the course of collecting documentation leading up to a live meeting for an audit.
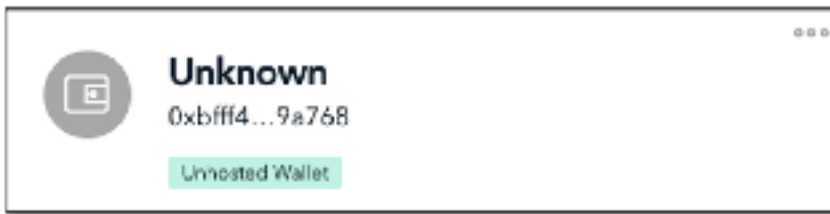
This one data point introduces several questions and inefficiency pitfalls. Are there any assets in this wallet? Is the value high enough that it's worth a referral to an expert? If the expert has a backlog of referrals piling up, how will they know if this one is worth prioritizing?
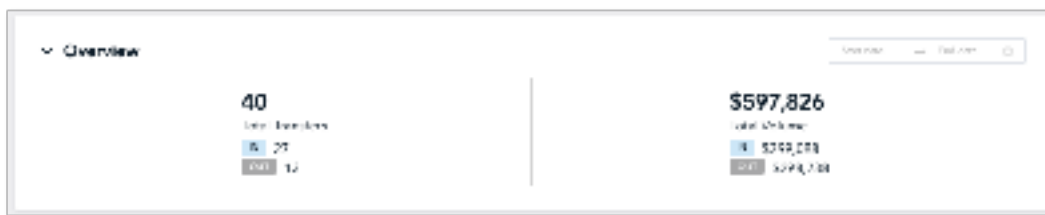
This unhosted wallet has a high throughput, with almost $300k moving in and out of the address. If undisclosed, this may indicate an individual using this wallet as a funnel account, with unreported crypto-income and attempts to evade tax obligations worthy of deeper investigation.

This unhosted wallet appears to have been created but never funded. An examiner coming across this address wouldn't want to send it along for analysis and expend resources unnecessarily.

In any single case, a wallet address's point-in-time balance, its transactional count, the assets it holds, the price of those assets when transacted in, the potential trading dates, and whether there is evidence of additional sources of income are all crucial data points for a tax authority. Relying on individual agents or examiners to manually uncover this information, often during an existing examination or as a one-off development project, is inefficient, resource intensive, and not sustainable.

The ability of tax authorities to automatically integrate both off-chain data and on-chain data into a unified data set – and then extract thousands risk-relevant and material crypto asset data points – is crucial to a tax authority's ability to scale its operations. It also establishes the foundation for the next pillar of effective scaling.