



Uncovering Financial Crime Risks with Crypto and Digital Assets

An Infosys Consulting Perspective

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INTRODUCTION

The increasing innovation in blockchain, proliferation of digital assets and cryptocurrencies and growth of smart contracts are driving regulators from various countries to bring digital assets in the regulatory boundaries without stifling the innovation. On the other side, crypto communities need to adhere to a common-sense regulatory framework to clean up their networks and transactions so that wrong organization and groups can't use their shoulders to conduct illicit activities.

With the list of financial institutions involved in digital asset transactions growing rapidly, firms will need a deeper understanding of various regulations. A clear understanding will be important to not only support potential new business opportunities but also follow through on multiple regulations and across jurisdictions until a consensus is achieved.

This paper looks at the current landscape of AML/CFT regulations for digital assets, implications of digital assets to financial institutions, and how financial institutions can successfully extend their businesses from traditional assets to digital in a compliant manner.

AML for Digital Assets

The growth of digital assets has brought tremendous AML/CFT risks exposure to financial institutions

Digital assets is a broad term that includes digital currencies (including certain convertible virtual currencies (CVCs), as well as digital assets that are securities, commodities, and derivatives^[1].

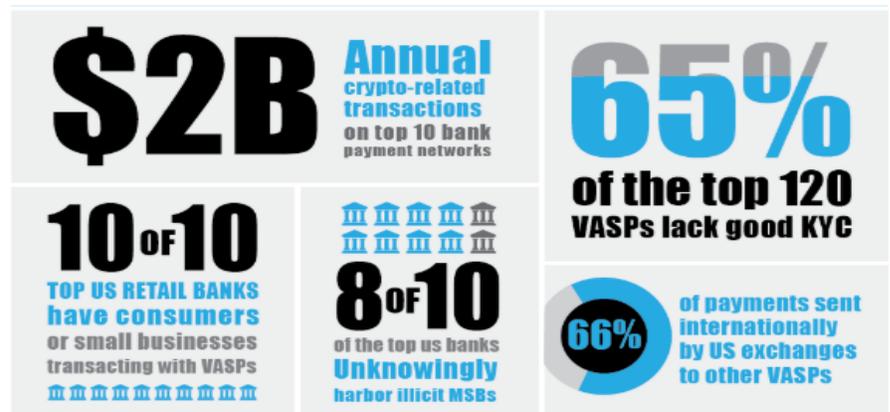
World Economic Forum and a community of over 40 central banks, international organizations, academic researchers and financial institutions have created a framework to help central banks evaluate, design and potentially deploy Central Bank Digital Currency (CBDC) ^[5]

From a survey result published in June 2020 by Fidelity, 36 percent of its respondents across the U.S. and Europe own cryptocurrencies or digital assets ^[6]

The participation in digital assets and cryptocurrencies is touching new milestones every single day. As of June 2020, the global cryptocurrencies market capitalization has reached USD 281 billion^[2]. Over the next seven years, the market size is projected to grow at the CAGR of 11%^[3]. Additionally, the total number of Ether addresses created exceeded 100+ million, with 100+ thousand new addresses being generated every day^[4] in the recent past. Cryptocurrencies are just one application of the larger process know as 'Asset Tokenisation' in the blockchain space: the process through which different assets rights are represented in the form of digital tokens.

As more mainstream consumer and institutional investors embrace cryptocurrencies, financial institutions can hardly disentangle themselves with the digital asset economy. This trend is visible even among several countries as they experiment with Tokenized (Digital) money or commonly referred as Central Bank Digital Currency (CBDC). However, not having an active and automated way to assess the relative risk associated with digital asset transactions can cause tremendous exposure to AML/CFT regulatory risks.

Banking and Virtual Currencies Are Increasingly Intertwined ^[7]



Source: CipherTrace Cryptocurrency Intelligence

Regulatory Landscape for Digital Assets

Regulatory bodies around the world have begun to update the regulatory frameworks to expand the coverage of digital assets.



The 2020 National Strategy declared “digital assets” to be one of the most **significant illicit finance vulnerabilities**, replacing the 2018 National Strategy, which assessed “virtual currencies” to be an emerging illicit finance risk.

Facebook’s stablecoin

Libra’s intended global reach would likely necessitate a consistent global anti-money-laundering framework

- *Lael Brainard, Federal Reserve governor*

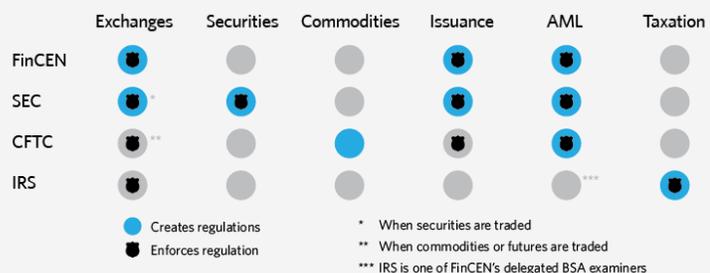
United States

In February 2020, U.S. Treasury released the new 2020 National Strategy for Combating Terrorist and Other Illicit Financing, highlighting the heightened potential AML risks posed by anonymity-enhanced currencies.

- Digital asset activities meeting the FinCEN’s definition of money transmission services should follow Money Services Businesses (MSBs) regulatory framework
- Digital asset activities involving securities or commodities would fall under SEC and CFTC regulatory framework

CFTC, FinCEN, and SEC also published the joint statement on the requirement for Financial Institutions to establish and implement an effective anti-money laundering program (AML Program) and record keeping and reporting requirements, including suspicious activity reporting (SAR) requirements for digital assets.

Which US Agencies Regulate and Enforce Regulation on Blockchain Entities and Activities^[7]



Source: CipherTrace Cryptocurrency Intelligence

5AMLD for Digital Assets

Cryptocurrency exchanges and custodian wallets will be classified as obliged entities and will have to perform the same AML checks as any obliged entity covered by 4AMLD rules. Cryptocurrency exchanges must register with relevant financial authorities in order to conduct business.

- Customer Due Diligence
- Monitoring of ongoing behavior
- Suspicious Activity Reporting (SAR)

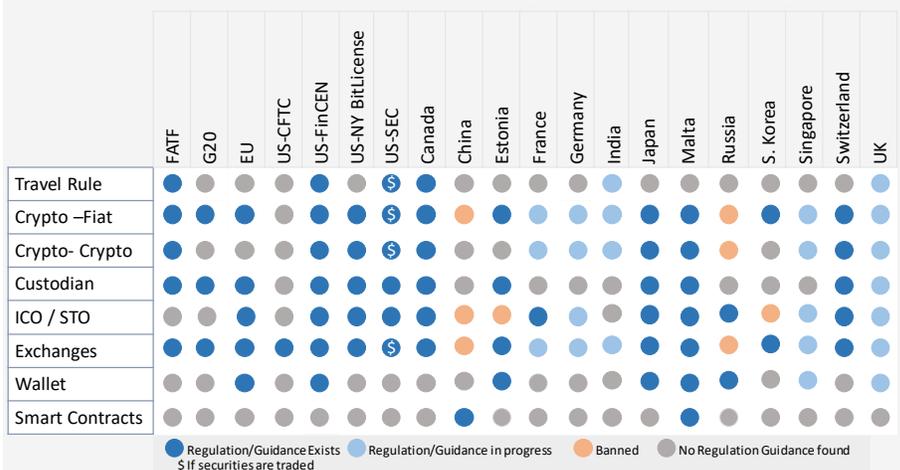


Some countries view cryptocurrency as a way to fight back against U.S. sanctions ^[9]. Venezuela issued a petro-backed cryptocurrency Petro ^[10], and Iran has already issued a gold-backed cryptocurrency PayMon of its own^[11].

UK

HM Treasury has implemented the Fifth Anti-Money Laundering Directive (5AMLD) through amending the UK's Money Laundering Regulations (MLRs) to include a broader set of cryptoasset business activities, including Fiat-to-crypto exchange, Crypto-to-crypto exchange, Custodial wallet provider, Initial Coin or Exchange Offering (ICO/IEO) and Cryptoasset ATM.

Glimpse of Current AML/CTF Regulations Globally^[8]



Source: CipherTrace Cryptocurrency Intelligence and additional Infosys research

Regulatory Gaps

There are still AML regulatory gaps that makes it hard to address illicit finance problems created by digital assets. The U.S. regulatory framework for money transmission does not cover the full range of illicit activities through digital asset. Additionally, given the borderless nature of the cryptocurrencies, there are gaps in other jurisdictions to follow the Financial Action Task Force (FATF) standards, which makes it difficult to ensure effective regulation and supervision of digital assets globally.

Elevated AML Risks of Digital Assets

The anonymity, liquidity, and borderless nature of digital assets introduce elevated AML/CFT risks for financial institutions.



Capital Raising

Raising capital through illicit activities by selling illegal goods or services in exchange for digital assets.



Placement

Opening anonymous cryptocurrency accounts helps money launderers to convert and consolidate illicit cash in a low-risk way.



Layering

Money launderers can use a fraudulent “capital raising” to convert their illicit proceeds in the form of digital assets back into fiat currency if they control the ICO.



Integration

Trading crypto-for-crypto could allow criminal institutions to take large stakes in any crypto businesses, with or without the awareness of those businesses.



Sanction Evasion

Anonymity and ease of creation of digital assets enable crypto-accounts to receive payments that might otherwise trigger terrorism financing or sanctions red flags.

Roadmap for Success

While each financial institution will have its challenges and successes, we have identified five key themes that financial institution can consider to re-examine their AML/CFT processes around Digital Assets.



Know your Customers (KYC)

- Complement existing KYC systems to include not only customers' KYC from VASPs but also KYC risk score of VASPs based on their actual customer onboarding process
- Scrutinize customer behaviors not just for immediate transactions but leverage VASPs data risk feeds to understand flow of funds, leveraging transparency of public blockchain



Know your Business (KYB)

- Combine on-chain and off-chain data along with transaction history to build profile of a business
- Monitor and track transactions to certain enterprise assets such as multi-signature wallets or with certain business-related smart contracts leveraging relevant solutions



Know your Transactions (KYT)

- Identify high frequency transactions or transactions to specific crypto exchanges and/or to crypto entities i.e. unregistered MSB or rouge jurisdiction of registered VASP
- Track payments made in relation to illicit activities for both crypto to fiat and crypto to other digital assets



Know your Data (KYD)

- Analyze indicators for certain market activities consuming data feeds from crypto intelligent sources and to act ahead of time i.e. public and private keys, TLS/SSL connection details, attributes of X.509 etc.
- Smart triggers based approval / rejection of questionable transactions for a fully indexed representation of customer digital assets profile



Know your Risk (KYR)

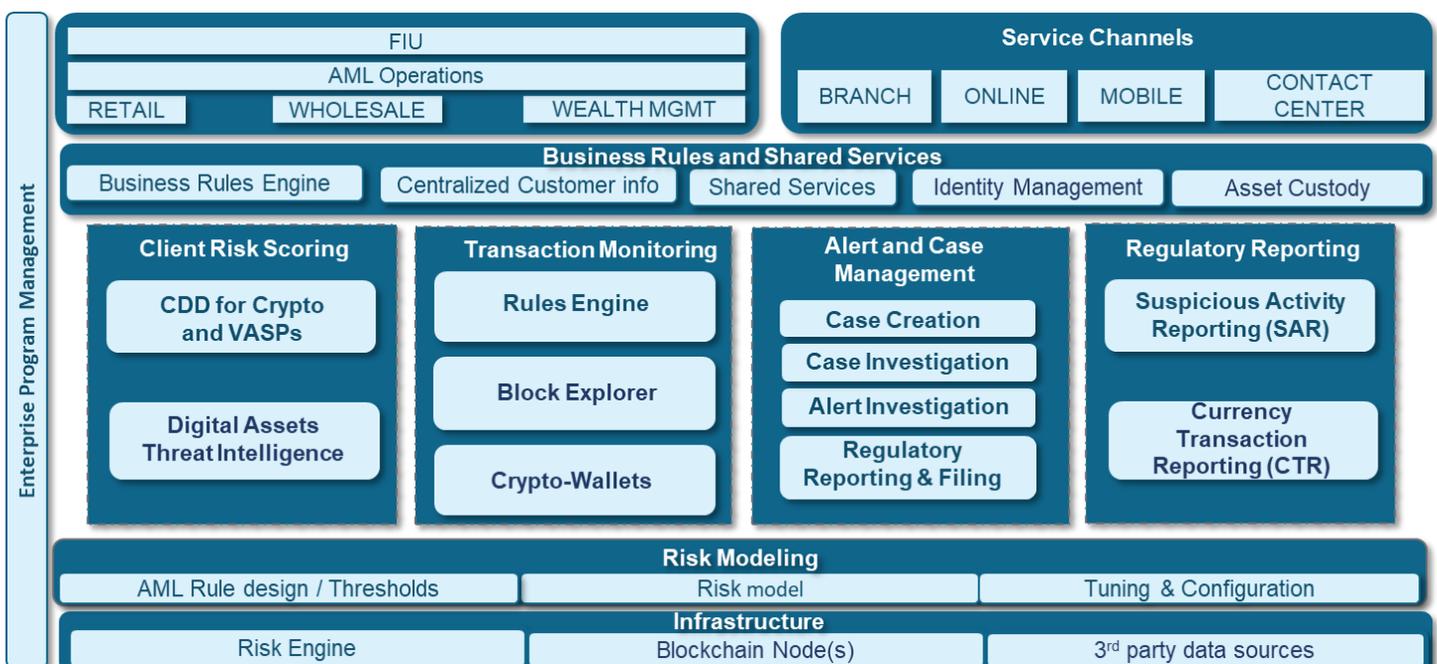
- Implement case by case risk-based approach as specified by FATF for VASPs by looking at the history of the transactions with wallets associated with illicit activity like sanctioned actors, terrorist organizations, or ransomware.
- Use real-time AI/ML powered interfaces to monitor, alert and prevent transactions with high risk crypto entities

Virtual Assets Service Providers (VASPs): Crypto Exchanges, Crypto MSBs, Digital Asset Issuers, P2P digital wallet providers, and others

Financial institutions can integrate various feeds to enhance their AML/CFT attributions to cover risk exposure from not only traditional assets (i.e. Fiat) but also digital assets and crypto – currencies.

1. Uncover counter-party risks associated with hundreds of crypto-exchanges, digital asset issuers, crypto MSBs and P2P digital wallet providers
2. Leverage existing registeries to obtain KYC scores of crypto-exchanges
3. Flag high-risk payments between banks, crypto-exchanges and bank’s customers
4. Identify unregistered crypto MSBs and P2P schemes using bank customer accounts
5. Identify payment fraud from dark web selling bank’s cards, prepaid products, and compromised accounts

Infosys has a deep AML/CFT domain expertise and experiences across various LoBs within the financial services, covering both fiat, crypto-currencies and digital assets



Conclusion

Looking to the Future

Although most of the financial institutions currently have several advanced tools and methods for AML/CTF compliance for conventional assets and payments, they are not well equipped to identify and monitor risks associated with digital assets or lack the expertise and resources to monitor digital asset businesses successfully.

Financial institutions need to lay a good foundation of data analytics and AI/ML capabilities along with emerging RegTech to build effective and efficient AML/CFT compliance to cover various aspects of the transactions related to digital assets.

Infosys along with industry leading partners like NICE Actimize and CipherTrace, provides comprehensive AML solution. With our solution, financial institution can uncover risk exposure not only for conventional payments but also digital assets transactions. This will enable FIs to offer innovative products and services with confidence and seize business opportunities in digital asset space.



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REFERENCES

- [1] National Strategy for Combating Terrorist and Other Illicit Financing (2020 Strategy), U.S. Department of the Treasury, Feb 2020, Link: <https://home.treasury.gov/system/files/136/National-Strategy-to-Counter-Illicit-Financev2.pdf>
- [2] Aggregator for cryptocurrencies, Link: <https://coinmarketcap.com/>
- [3] Cryptocurrency Market to register a CAGR of 11.2% by 2027, Link: <https://www.fortunebusinessinsights.com/press-release/cryptocurrency-market-9952>
- [4] Ethereum mainnet block explorer <https://etherscan.io/chart/address>
- [5] Central Banks 'Waking Up' to Digital Currency, Create New Framework for CBDC Deployment with World Economic Forum, Link: <https://www.weforum.org/press/2020/01/central-banks-waking-up-to-digital-currency-create-new-framework-for-cbdc-deployment-with-world-economic-forum-177ca5d9ee/>
- [6] Fidelity Digital AssetsSM survey, Link: <https://newsroom.fidelity.com/press-releases/news-details/2020/Growing-Number-of-Institutional-Investors-Believe-That-Digital-Assets-Should-Be-a-Part-of-Their-Investment-Portfolios-According-to-New-Research-from-Fidelity-Digital-Assets/default.aspx>
- [7] Cryptocurrency Anti-Money Laundering Report, 2019 Q4, Page 9, Link: <https://ciphertrace.com/wp-content/uploads/2020/02/CipherTrace-CAML-2019-Q4-20200220.pdf>
- [8] Cryptocurrency Anti-Money Laundering Report, 2019 Q4, Page 20-21, Link: <https://ciphertrace.com/wp-content/uploads/2020/02/CipherTrace-CAML-2019-Q4-20200220.pdf>
- [9] Trend Continues For Countries Looking To Evade U.S. Sanctions Using Crypto, Link: <https://www.forbes.com/sites/jasonbrett/2020/01/29/trend-continues-for-countries-looking-to-evade-us-sanctions-using-crypto/#23dab4ed59ff>
- [10] Venezuelan Petro Against US Sanctions, Link: <https://cointelegraph.com/news/venezuelan-petro-against-us-sanctions-history-and-use-of-the-crypto>
- [11] A gold-backed cryptocurrency called "PayMon" has reportedly been launched in Iran, Link: <https://www.coindesk.com/gold-backed-cryptocurrency-launched-by-iranian-banks-report>

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