VIRTUAL LAUNDROMATS?

BITCOIN, CRYPTOCURRENCIES, AND THE DIGITAL AML LANDSCAPE
ERIC VOGELER

• Former Litigator, *BTJD*
• Current GC and CCO of Bitsy, Inc.*
• Virtual Currency Fan Since 2012
  • First bought Bitcoin in 2012
  • Sold it after six months of sliding sideways for ~$700
  • That Bitcoin would have been worth ~$75,000 at the latest peak in 2017

*(NMLS 1749137)*
WHAT IS VIRTUAL CURRENCY?

• That’s a good question!
  • And one that’s up for debate:
    • IRS: Property
    • SEC: Securities(?)
    • CFTC: Commodity(??)
    • US States: Money Transmission(???)
    • Germany: ???
Federal

Most States

Private Sector

Regulation?

BSA AML Tax

License?

$$$

License?
WORKING DEFINITION OF VIRTUAL CURRENCY

• 23 CRR-NY 200.2(p)
  • virtual currency means any type of digital unit that is used as a medium of exchange or a form of digitally stored value. virtual currency shall be broadly construed to include digital units of exchange that: have a centralized repository or administrator; are decentralized and have no centralized repository or administrator; or may be created or obtained by computing or manufacturing effort.
COMMON FEATURES OF VIRTUAL CURRENCY

- Blockchain
- Decentralized
- Immutable
- Trustless
Virtual currencies tend to exist on their own blockchain.

Blockchains are protocol layers that record, secure, and enable the transfer of virtual currencies.

Every transaction is recorded on a “block”

Every block on the chain is logged and verifiable by other users or entities.
Rather than relying on a central database or silo, all transactions are encrypted, logged on the blockchain, and distributed redundantly (i.e., every Node gets a copy).
IMMUTABLE

• Once logged, transactions cannot be undone without modifying the entire blockchain (see Ethereum DAO).

• Regardless of the intentions and actions of the human actors, once a transaction is initiated and recorded, it is carried out.

• Let me repeat—once logged transactions cannot be undone.
TRUSTLESS

• All peer-to-peer transactions require an element of trust:
  • Trust that the transaction will be completed;
  • Trust that one peer will not kill the other peer during the transaction;
  • Trust that one peer actually has the asset they have represented.

• Blockchains obviate the need for much of that trust.

• Trust is not wholly eliminated, but becomes decentralized and distributed:
  • We “trust” everyone on the chain in the aggregate.
AML-SPECIFIC CONCERNS

• Anonymity
• Immutability
• Liquidity
• Inconsistent Regulation
ANONYMITY
THE PROBLEM WITH ANONYMITY
(IT’S A FEATURE, NOT A BUG)

Most virtual currency users are not currently tracked or easily trackable.

Individual wallets lack practically any personally identifying information.

Some currencies are designed specifically to remain anonymous and untrackable (XMR).
WHAT YOU DON’T KNOW CAN HURT YOU

Anonymous User

New Wallet
or
Mixer

New Wallet
or
Mixer

Anonymous User

Regulated Exchange
(e.g. Coinbase)

$
IMMUTABILITY
Message from QuadrigaCX Board of Directors

January 31, 2019

Dear Customers,

An application for creditor protection in accordance with the Companies’ Creditors Arrangement Act (CCAA) was filed today in the Nova Scotia Supreme Court to allow us the opportunity to address the significant financial issues that have affected our ability to serve our customers. The Court is being asked at a preliminary hearing on Tuesday February 5 to appoint a monitor, Ernst & Young Inc., as an independent third party to oversee these proceedings.

For the past weeks, we have worked extensively to address our liquidity issues, which include attempting to locate and secure our very significant cryptocurrency reserves held in cold wallets, and that are required to satisfy customer cryptocurrency balances on deposit, as well as sourcing a financial institution to accept the bank drafts that are to be transferred to us. Unfortunately, these efforts have not been successful. Further updates will be issued after the hearing.
Liquidity
CRYPTO MARKETS ARE HIGHLY LIQUID

• Coinmarketcap.com lists 259 cryptocurrency exchanges

• Binance, the world’s highest volume exchange, does more than $2 billion in volume *per day* (located in Hong Kong)

• Coinbase, the United States’ largest regulated exchange, does roughly $400 million in volume *per day*

• **BUT**: Fiat (USD) currency on- and off-ramps remain relatively throttled and regulated in the United States
LACK OF UNIFORM REGULATION
NO RULE TO BIND THEM ALL

- New York Bit License
- Modified Money Transmitter Laws (CT, VT, WA)
- Reliance on Federal Regulations (BSA / AML, OFAC)
- Wild West (including Utah)
BSA / AML
CONCERNS AND SOLUTIONS

- Biggest Threats
- Regulatory Requirements
- Best Practices
BIGGEST THREATS

• Reputation
  • Perception
  • Hacks

• Fraud
  • Immutable

• Laundering
  • Anonymity
  • Structuring
    • Almost impossible to detect when launderer uses mixers or large, reputable public wallets

• Regime and Cyber-Terrorism Financing
  • Ransomware
    • $45 million received in cryptocurrency through April 2018*
  • North Korea
    • Estimated $670 Million in Cryptocurrencies (BTC, ETH, etc.)
REGULATORY REQUIREMENTS

• AML / BSA Policy and Program
  • CCO familiar with virtual currency (3+ years in the space, NY)

• Cybersecurity Program
  • CISO
  • Transaction Monitoring—Fiat AND Virtual Currency
  • Robust physical and cloud security
    • Central custody of virtual currency = DELICIOUS HONEY POT

• Licensing
  • Money Transmitter, Bank Charter
  • Bit License (NY)

• Privacy (CCPA, GDPR)
  • Virtual Currency = PII ?
BEST PRACTICES

• **Customer Due Diligence (EDD?)**
  • KYC, KYC, KYC
    • Third Party-Customer Verification
      • Experian, IdentityMind
      • Credit check, email, IP, device analysis, language analysis
    • Photo-ID and Selfie Analysis
      • Industry Standard
  • Biometric Security
  • Programmed Compliance and Controls

• **Blockchain Monitoring and Analytics**
  • Required by NY Bit License
TAKEAWAYS

• Virtual Currencies are not going anywhere (see Facebook)
• Services exist to enable and improve CDD and EDD
• Distributed Ledgers Cut Both Ways
  • Risk: Anonymity and liquidity may heighten AML concerns
  • Mitigation: Immutability and blockchain logs a transaction forever
    • Silk Road, Ross Ulbrecht, the “Dread Pirate Roberts”
    • Bitcoin enabled his empire and brought it down (see American Kingpin)