



# Virtual Assets

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## 'You feel sick': Burnaby musician falls victim to \$1,500 bitcoin scam



Dana Macleod, 32, says a fraudster's call convinced her - against her suspicions and hesitation - to withdraw \$1,500 and deposit in a bitcoin ATM. (Rafferty Baker/CBC)



## Surrey resident falls victim to \$18,000 CRA, Bitcoin scam

Police provide tips to help others avoid being defrauded

Jun. 22, 2018 12:00 a.m. / [NEWS](#)

[Read more below](#)



A Victoria woman lost \$4,000 after scammers convinced her to convert money into bitcoin. (Unsplash photo)

## Victoria woman loses \$4,000 to 'aggressive, manipulative and convincing' bitcoin CRA scam

VicPD officer receives scam call himself while investigating case

[VICTORIA NEWS STAFF](#) / Jun. 24, 2020 12:15 p.m. / [LOCAL NEWS](#) / [NEWS](#)

# What is a Virtual Asset?

....a digital representation of value that can be digitally traded or transferred, and can be used for payment or investment purposes, and functions as a:

## 1 - medium of exchange

- Operates like a currency in some environments eg. online

## 2 - a unit of account

- Define, record, compare value and/or

## 3 - a store of value

- does not have legal tender status, but will have value to a creditor willing to accept it



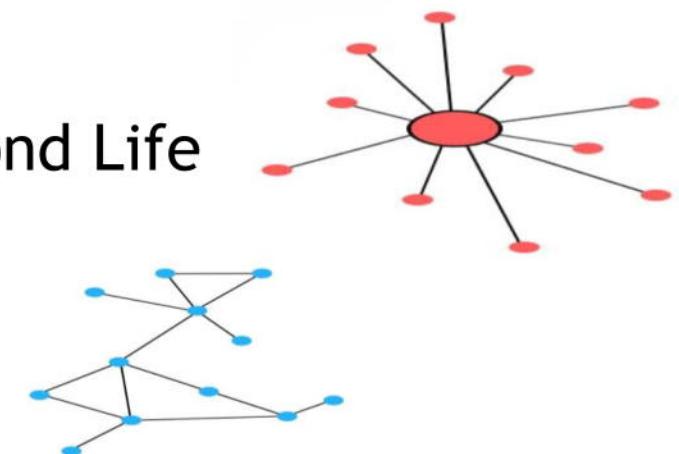
# Two Types of Virtual Assets

## 1 - Non-Convertible

- VC which has no value outside of a specific environment, e.g. online gaming (World of Warcraft Gold)

## 2 - Convertible

- **Centralized** (Single administering authority, e.g. Second Life virtual world)
- **Decentralized** (No central administering authority, monitoring or oversight. Operates peer-to-peer)

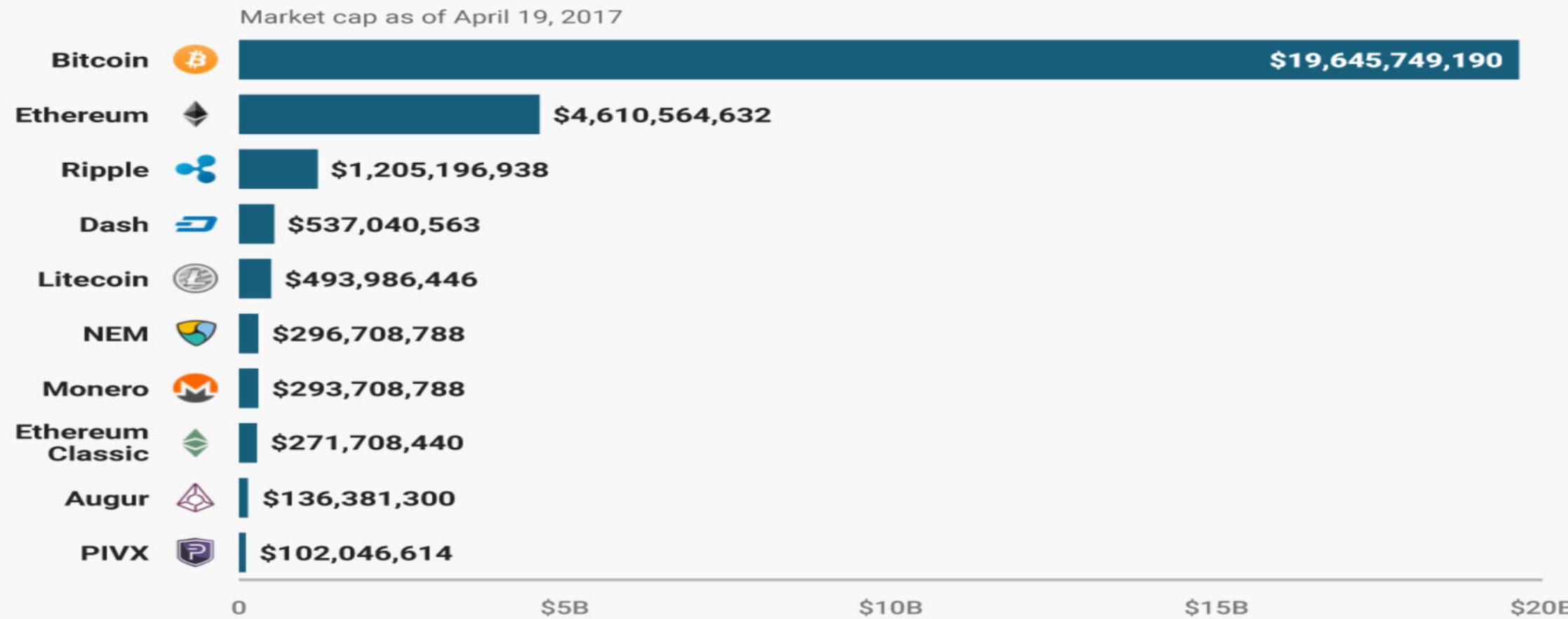


Virtual currencies which are convertible, decentralized AND use cryptography are known as **cryptocurrencies**



# ALTCOINS 2017

## 10 CRYPTOCURRENCIES HAVE A MARKET CAP OVER \$100M



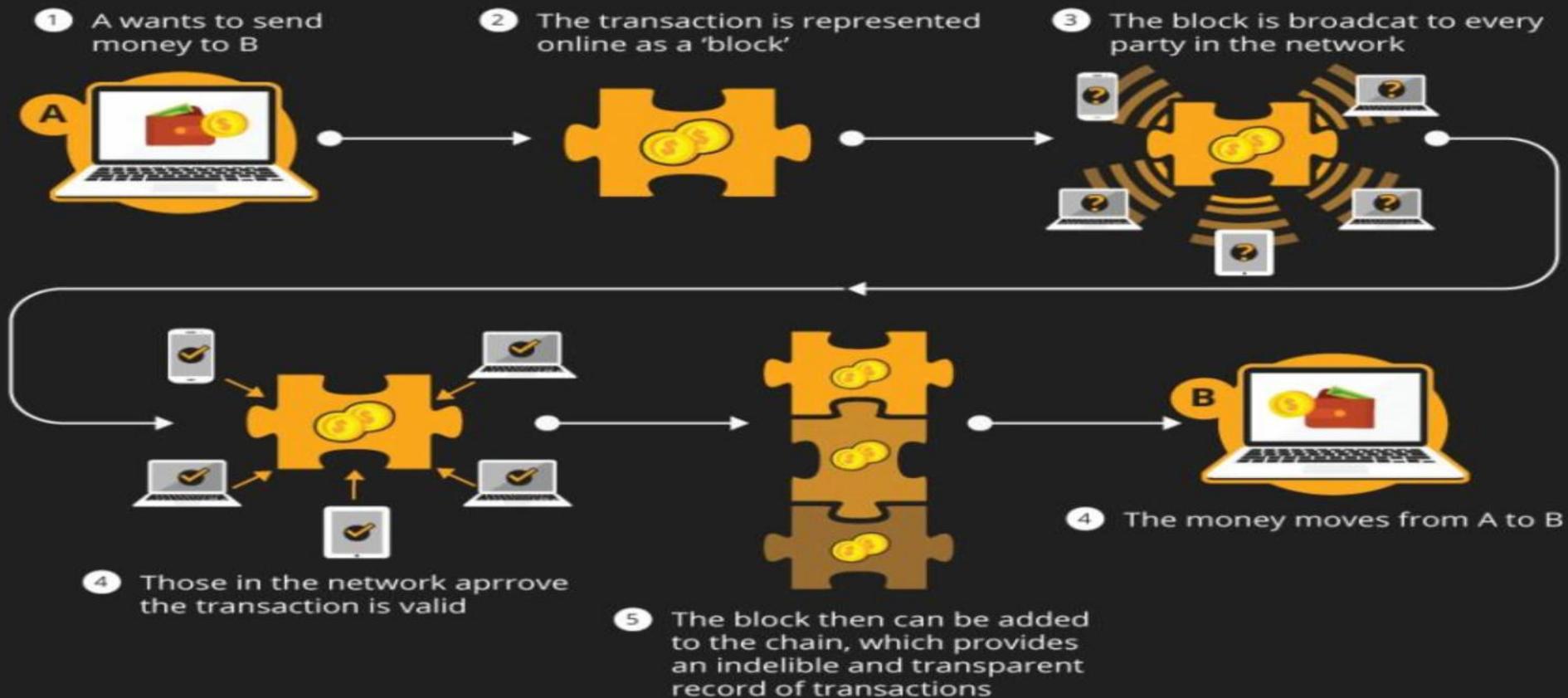
SOURCE: CoinMarketCap.com

BUSINESS INSIDER

# Market Capitalization 2020

#	Name	Price	24h	7d	Market Cap	Volume	Circulating Supply	Last 7 Days	More
1	Bitcoin BTC	\$17,023.15	▲ 4.43%	▲ 11.48%	\$315,711,414,483	\$36,357,319,740 2,135,757 BTC	18,546,000 BTC		⋮
2	Ethereum ETH	\$467.95	▲ 3.16%	▲ 5.02%	\$53,095,016,079	\$13,405,581,852 28,647,737 ETH	113,464,084 ETH		⋮
3	Tether USDT	\$1.00	▼ 0.03%	▼ 0.03%	\$17,954,415,266	\$126,972,579,801 126,937,411,289 USDT	17,949,442,302 USDT		⋮
4	XRP XRP	\$0.298755	▲ 8.57%	▲ 16.95%	\$13,541,995,677	\$5,652,810,622 18,921,249,341 XRP	45,328,155,123 XRP		⋮
5	Chainlink LINK	\$12.78	▲ 3.98%	▼ 0.53%	\$5,017,831,890	\$1,224,383,324 95,774,862 LINK	392,509,556 LINK		⋮
6	Litecoin LTC	\$72.20	▲ 6.51%	▲ 23.73%	\$4,757,870,970	\$5,472,517,002 75,799,706 LTC	65,901,160 LTC		⋮
7	Bitcoin Cash BCH	\$252.98	▲ 1.45%	▼ 1.84%	\$4,699,093,907	\$1,583,901,500 6,260,889 BCH	18,574,706 BCH		⋮
8	Polkadot DOT	\$4.82	▲ 8.63%	▲ 9.33%	\$4,235,037,010	\$627,268,909 130,148,903 DOT	878,706,744 DOT		⋮
9	Binance Coin BNB	\$28.38	▲ 1.39%	▲ 0.87%	\$4,098,074,678	\$298,302,822 10,511,493 BNB	144,406,561 BNB		⋮
10	Cardano ADA	\$0.110625	▲ 8.11%	▲ 4.37%	\$3,441,827,758	\$575,841,131 5,205,329,725 ADA	31,112,484,646 ADA		⋮

# How Blockchain Works





# Crypto miner Bitfarms to invest \$250 million in Sherbrooke facility



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# Transactions

## Transactions

Hash [3f11b099af7ecd59ab542980bdfe1a...](#) 2017-10-17 07:43

 [1792L4zayp2rM...](#) 0.01681780 BTC  [1BwVbCKvSBEh...](#) 0.01124380 BTC   
[1GR8DULWVYg...](#) 0.00512200 BTC 

Fee 0.00045200 BTC  
(200.000 sat/B - 50.000 sat/WU - 226)  +0.00512200 BTC

Hash [3f11b099af7ecd59ab542980bdfe1a...](#) 2017-10-17 07:43

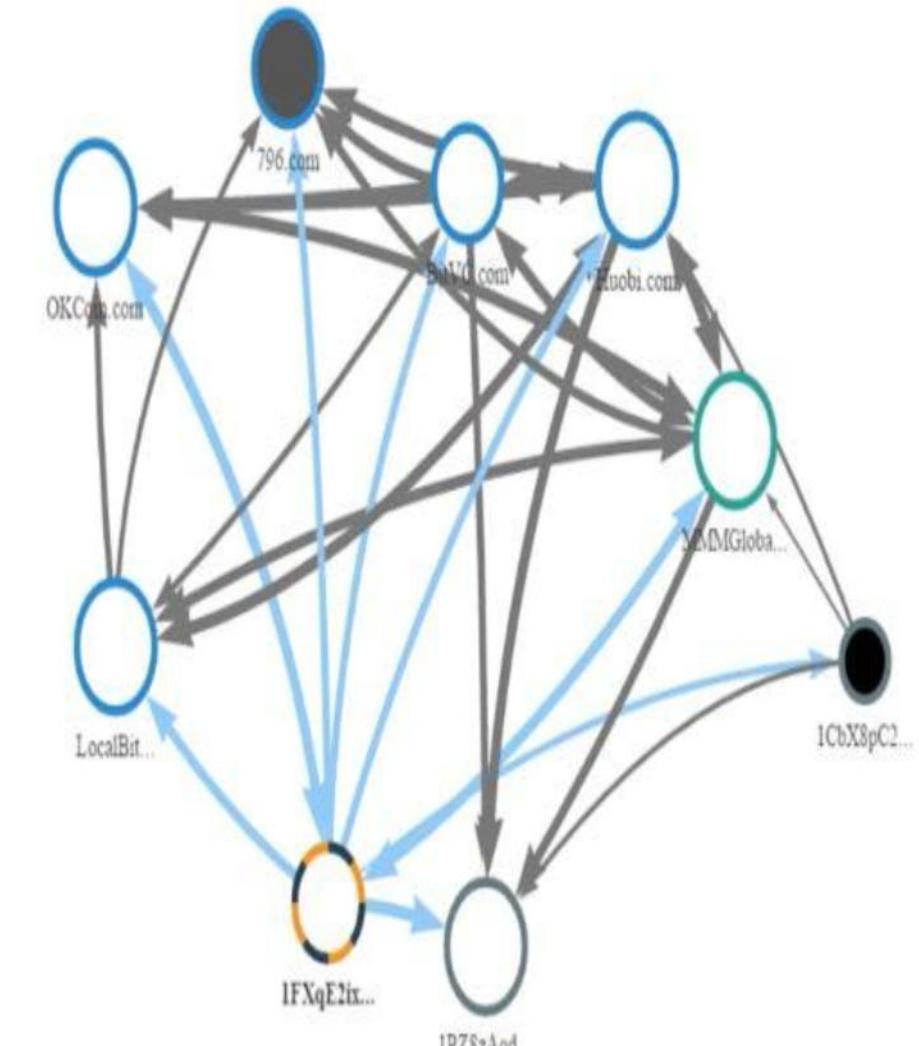
 [1792L4zayp2rMqfnEbsq...](#) \$125.51  [1BwVbCKvSBEh9vTqxDr8...](#) \$83.91   
[1GR8DULWVYgbhqik3mL...](#) \$38.23 

Fee \$3.37  
(200.000 sat/B - 50.000 sat/WU - 226)  +\$38.23

# Blockchain Tracing

## Aftermarket Software Tools (\$\$\$)

- software systems that specialize in data analysis
- IP address analysing, Visual presentation, Attribution
- Can purchase license or hire third party analytics
- Can facilitate interagency deconfliction, may assist with SME testimony



# Public/Private Key Pairs

## A Bitcoin Public Address

**19PXg2Ljftt9hRj4R9xYjprsSw43ZhreSB**

Case sensitive!!!

- Is shared with others so you can receive funds
- Can be thought of as an email address for accepting e-transfers
- May be represented by QR codes



## A Bitcoin Private Key

**KxJiXNGePRvbnfp1qFHGHCVtXF8662NbVvkn6EgGtYt6Xzh9yPY**

- Similar to your password. It is required in order to spend your VC. If you own the private key, you own the BTC.



# Managing Cryptocurrencies In Digital Wallets

- Digital wallets are hardware or software that manage keys, addresses, and transactions (think of it as a keychain)
- Every transaction linked to your address is stored in the wallet.

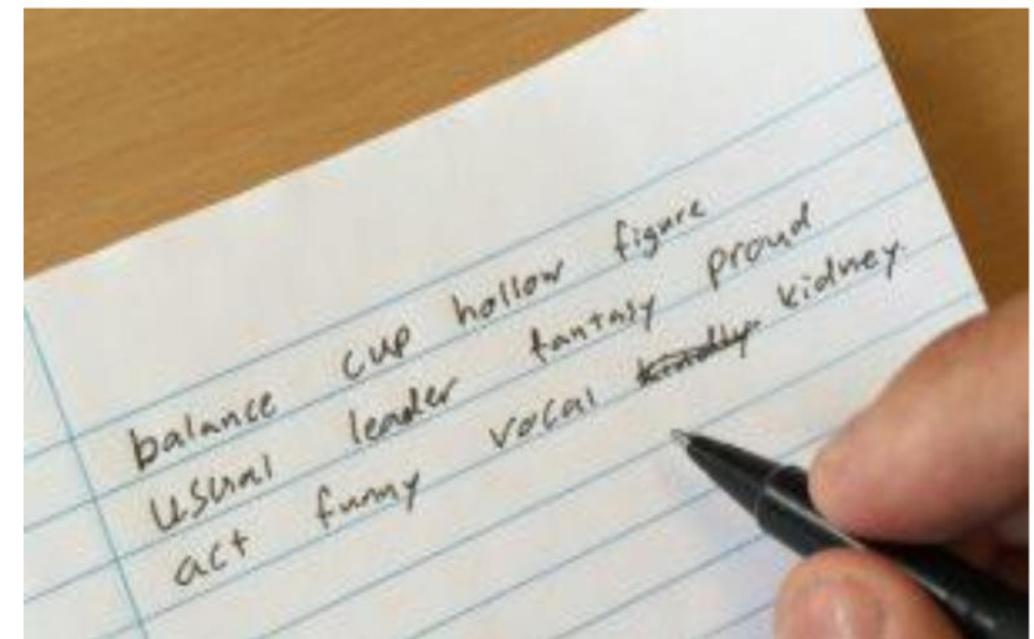
*Can view all spending and receiving habits!*



# Seed Phrase

- Usually 12 to 24 words. Allows a user to recover funds when device is disabled or lost

1 toe	7 little	13 globe	19 cousin
2 miss	8 wink	14 thank	20 vibrant
3 arrive	9 any	15 clump	21 hockey
4 bonus	10 knee	16 connect	22 wave
5 gallery	11 exhaust	17 second	23 fragile
6 fan	12 below	18 bicycle	24 cricket



Any person who has access to a seed phrase can recreate their wallet and move their cryptocurrency.



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# Modes of Exchange: Public Exchanges

- An entity engaged as a business in the exchange of virtual currency for real currency, funds, or other forms of virtual currency, and vice versa, for a fee
- Brick & Mortar and/or online business
- Set up account and purchase using payment method such as a credit card or bank transfer, often through 3rd party service provider



# Public Exchanger KYC Protocols

Most exchangers gather a significant amount of information from their clients!

- Name
- Address
- Phone Number
- Email
- Government photo ID
- Photo of customer holding their photo ID
- Bank account information
- Credit cards
- Transaction history (ID, hash, date/time stamp, other wallet addresses)
- Custodial wallet info (ID, balance, trading history)

# Modes of Exchange: Private Exchangers

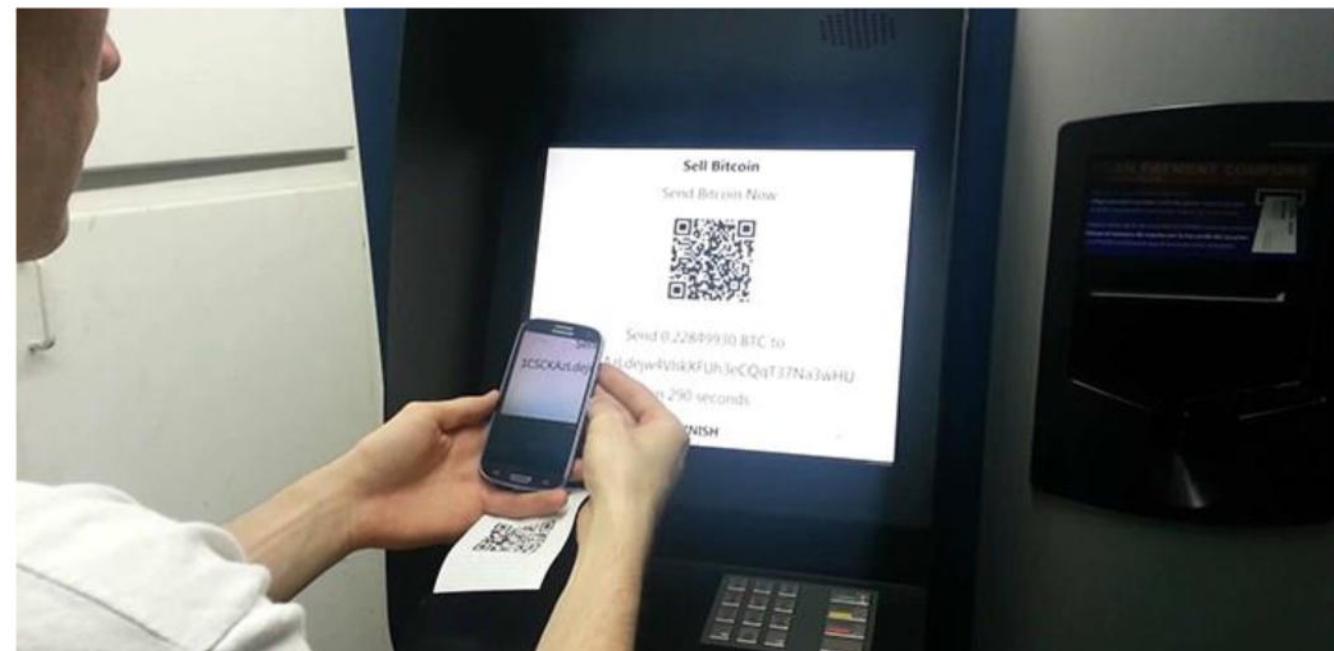
- Buy & Sell crypto
- Often direct trades
- May meet in public places or peer-to-peer transfer online
- May deal in cash
- May employ minimal KYC
- High transaction fees
- Anonymous communication
- Money exchanged into Bitcoin
- Risk of assault and fraud



*“Hello, I am buying your BTC for cash now!  
Meeting preferences: Safe trades,  
Restaurants, coffee shops, home or office”*

# Modes of Exchange: Bitcoin ATMs

- Offer higher exchange rates
- Some machines are bi-directional

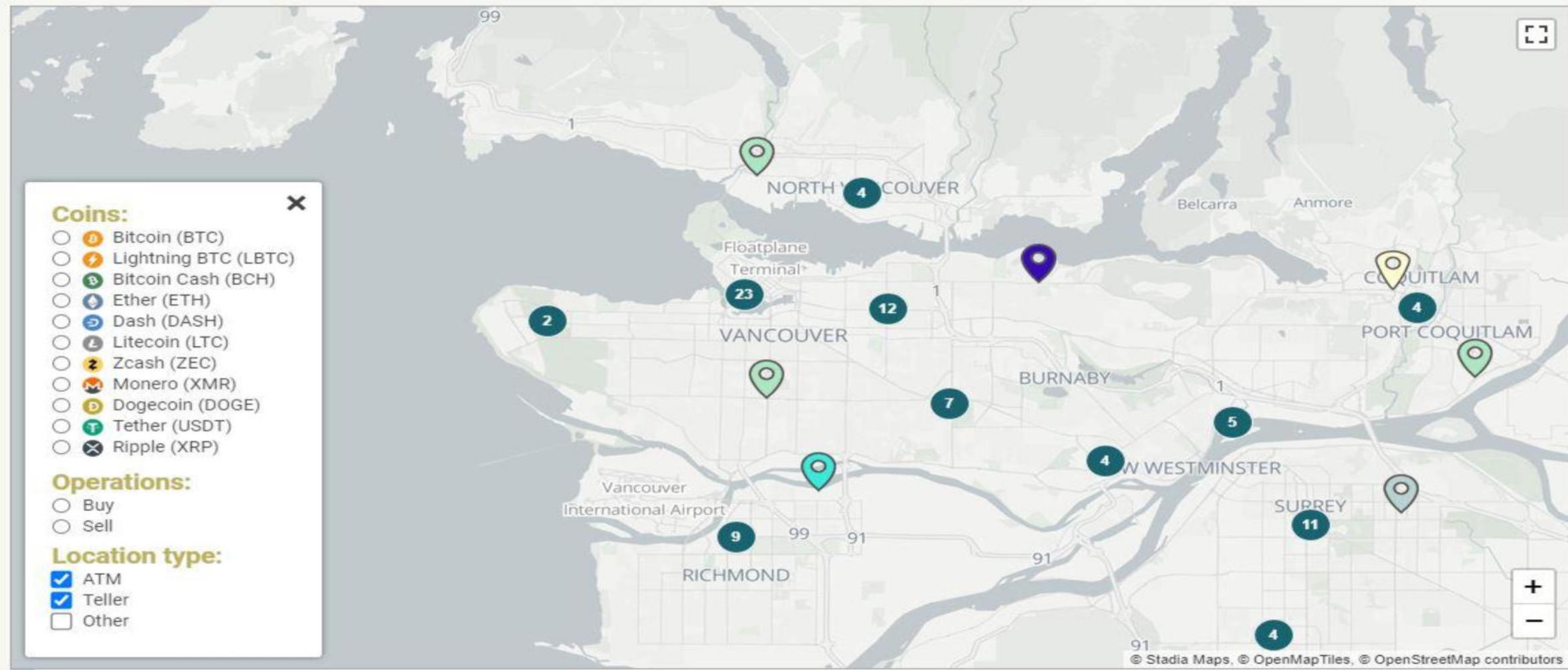


# Finding a Bitcoin ATM

[Coinatmradar.com](https://Coinatmradar.com)

## Bitcoin ATMs in the British Columbian Lower Mainland

Total number of Bitcoin ATMs / Tellers in and around Vancouver CA: 101



## Operator details



Operator's name: [Bitcoiniacs](#)

1 (604) 727-0170

[contact@bitcoiniacs.com](mailto:contact@bitcoiniacs.com)

[On the map: All Bitcoiniacs bitcoin ATM locations](#)

Are you operator? Check the [list of services we provide](#).

## Location

City: [Vancouver CA](#)

Location: [Waves Coffee House](#)

Address:

900 Howe St #100  
Vancouver, BC V6Z 2M4  
Canada



Open hours:

Mon-Fri: 6:30 am – 10:00 pm  
Sat: 8:00 am – 9:00 pm  
Sun: 9:00 am – 6:00 pm

## Bitcoin machine details

ATM Type: [General Bytes](#)

Supported coins and fees:

Prices are updated just now.

	Buy	Sell
Bitcoin		
	CAD 23734.81 (fixed fee (?) + 6.6%*)	CAD 21041.36 (fixed fee (?) + 5.5%*)
Litecoin		
	CAD 103.95 (fixed fee (?) + 7.6%*)	CAD 86.49 (fixed fee (?) + 10.4%*)
Supported fiat:	CAD	CAD

\* Percentage fees are independently calculated by Coin ATM Radar based on actual price at machine and market price [BitcoinAverage] (might differ from rates claimed by operator).

**Limits and verifications:**

\$20 - 200 SMS verification  
\$201 - 10000 ID scan verification

**Details:**

Cryptocurrency machine is installed at Waves Coffee House in Vancouver CA.

You can buy and sell BTC, LTC for CAD here.

This is the world's first Bitcoin automatic teller machine. It went live in a downtown Vancouver coffee shop, allowing people to exchange Canadian cash for the digital currency at a current rate of \$211.79 per Bitcoin.

# Vancouver considering a ban on Bitcoin ATMs - which police say are 'ideal' for money laundering

by Jen St. Denis, Star Vancouver  
Tues., June 4, 2019



Canada



# Modes of Exchange: Prepaid Bitcoin Debit Cards

- Load your card using your bitcoin.
- Spend funds anywhere prepaid cards are accepted, or withdraw fiat cash from any ATM.

“No photo ID required, reloadable, use it anywhere VISA is accepted”.

- Electronic: email and name
- Tangible: PO box
- Giftcards



# Additional Modes of Exchange

## Over-The-Counter (OTC) Brokers:

- Provide a means to exchange large amounts of cryptocurrency outside of an open exchange

## Private off-chain transactions:

- Exchange not recorded on the Blockchain

## Lightning Network:

- Numerous transactions occurring outside of the main Blockchain and recorded as a single transaction



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# Bitcoin is #1

## But it has flaws:

- Lack of Privacy
- Potential for high transaction fees
- High Volatility
- Long wait times (scaling)
  - Bitcoin: 7 transactions per second
  - Visa: 24,000 transactions per second
- Not backed by a central authority (No insurance!)
- Transactions are irreversible



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# Other Alternative (Alt) coins on the rise!

## Stable Coins

- Offer a Stable exchange rate to fiat currency
- Backed by fiat currency or stable commodity

## Privacy Coins:

- May offer encrypted transactions
- May offer built-in mixing services
- Offer enhanced privacy

## Alt Coins:

- Refers to any coins other than Bitcoin
- Some offer ability for Smart Contracts & Distributed Applications



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# *Facebook-Backed Libra Cryptocurrency Project Is Scaled Back*

After months of criticism, the cryptocurrency is moving ahead with significant revisions.



Mark Zuckerberg, Facebook's chief executive, testified on Libra last October in Washington. Pete Marovich for The New York Times

# Benefits and Drawbacks of Cryptocurrency for Criminals & Money Launderers

ADVANTAGES	DISADVANTAGES
Fast Transactions	Volatility of Value
Minimal Fees	Traceability
Accessibility	Lack of Understanding by Criminals
Global Movement of Value (Security, Speed & Cost)	
Pseudo-anonymous	
Lack of Understanding by Law Enforcement	
Lack of Global Regulations	

# Cryptocurrency & Criminality

- Frauds
  - Extortion
  - Ponzi Schemes
  - Initial Coin Offerings
- Ransomware/Malware attacks /DDos Attacks
- Drug sales - Darkweb marketplaces & traditional
- Human Trafficking
- Terrorist Financing
- Money Laundering



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# Origins of Virtual Currency and Crime

... is not a question

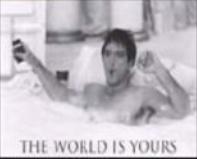
**Shadowcrew**  
For Those Who Wish To Play In The Shadows!

FAQ Search Memberlist Usergroups  
Profile You have no new messages Log out [ Angry Italian ]

## Blank CCS - VISA - MC - Blowout Sale !

[NEW TOPIC](#) [POST REPLY](#) Shadowcrew Forum Index -> Credit, E-Currencies, Checks, and Bank Accounts

[View previous topic](#) :: [View next topic](#)

Author	Message
<b>Scarface</b> Reviewed Vendor  THE WORLD IS YOURS <small>Joined: 04 Jan 2004 Posts: 63 Location: Online</small>	<p>Posted: Fri Jan 30, 2004 6:47 am Post subject: Blank CCS - VISA - MC - Blowout Sale ! <a href="#">quote</a></p> <p>Hi I am make blowout sale for all . \$15 per blank minumum 100 blanks . for non adding buyers : \$1,500 for 100.</p> <p>I have a total of 1,000 of these for blowout sale then prices are go back up .</p> <p>if buy 1k all one buyer then big discount .</p> <p>These are same as Charlie</p> <p>1. pressure lam + inkjet pvc sheet made ccs, heatpress holos + real sig stripe, very good quality</p> <p>1-5 pieces \$60 6-10 pieces \$50 11-15 pieces \$45 over 15 pieces \$40 with UV or without UV, (just add \$10 for cards with UV),</p> <p><a href="http://208.218.73.139/images/vti/pvthc/frontz.jpg">http://208.218.73.139/images/vti/pvthc/frontz.jpg</a></p>

# Virtual Currency Brokers and Exchange Platforms

2004/12

eCardOne: official Exchange: Liberty Reserve, cgold, Buy: Liberty reserve, LR, CG



eCardOne - Your One place for Electronic Transactions

**Buy liberty reserve and exchange liberty reserve to other ecurrencies.**

Welcome to eCardOne, Your One place for Electronic Transactions. eCardOne is based on fair and personal approach, offering payment solutions to large companies as well as individuals wishing to transfer or exchange funds. eCardOne is a successor of GoldExchange.eu, the renowned exchanger.

**Buy liberty reserve with Alertpay and bank wire.**

Ecurrency exchange is provided under the financial license of eCardOne Financial Corporation, Panama. Buy or sell Liberty Reserve and other ecurrencies and you will be guaranteed lowest rates, fastest exchange, and best customer support on the market. eCardOne was previously known as GoldExchange.eu.

**Exchange: We convert liberty reserve to ecurrencies.  
We help you to swap and move liberty reserve to , cgold, Pecunix.**

Do you wish to exchange Liberty Reserve EUR to USD? Then click here and trade Liberty Reserve currency and other ecurrencies like c-gold between each other within seconds. Check our fluctuating rates and speculate on the Digital Currency market. You can earn by selling and buying ecurrencies at profitable rates. The system is fully automated.

**ATM Visa debit Card**

Withdraw money from your Liberty Reserve account easily with our Visa Debit Card. Simply order your card here and it will be shipped to you at the lowest price. Then instantly convert Liberty Reserve and withdraw cash at your local ATM, or pay in stores and on the Internet.

**DGC Banking**

eCardOne is introducing a revolutionary platform for e-currency trading: ECO Banking. Sign up for real time Liberty Reserve Exchange and extended possibilities of deposits and withdrawals (coming soon). Experience Your One Place for Electronic Transactions.

Toronto

# 'Twas completely destroyed': Bitcoin scam victims lose \$340K in York Region, police say

Police say tracking down fraudsters or recovering money is likely impossible

Nick Boisvert · CBC News · Posted: Nov 08, 2017 3:04 PM ET | Last Updated: November 8, 2017



# Ransomware



**Task Manager**

**IMPORTANT! PLEASE READ!**

Unfortunately the files on this computer (ie. documents, photos, videos) have been encrypted using an extremely secure and unbreakable algorithm. This means that the files are now useless unless they are decrypted using a key.

**The good news is that your files are not lost forever! This tool is able to rescue the files on your computer for you!**

BY PURCHASING A LICENSE FROM US, WE ARE ABLE TO RESCUE YOUR FILES 100% GUARANTEED FOR A VERY LOW EARLY BIRD PRICE OF ONLY \$300 USD!\* In 5 days however, the price of this service will increase to \$600 USD, and after 10 days to \$1000 USD.

Payment is accepted in Bitcoin only. You can purchase Bitcoin very easily in your area by bank transfer, Western Union, or even cash.

Visit [www.localbitcoins.com](http://www.localbitcoins.com) to find a seller in your area. You can also google Bitcoin Exchanges to find other methods for buying Bitcoin.

Please check the current price of Bitcoin and ensure you are sending the correct amount before making your payment! Visit [www.bitcoinvantage.com](http://www.bitcoinvantage.com) for the current Bitcoin price.

After making your payment, please wait up to 24 hours for us to make your key available. Usually done in much less time however.

IMPORTANT: Once the key is available and you click "Decrypt Files", please wait and let the decryption process complete before closing this tool. This process can take from 15 minutes to 2+ hours depending on how many files need to be decrypted. You will get a notification that the decryption process is complete, at which time you can click "Exit". Removing this tool from your computer without first decrypting your files will cause your files to be lost forever.

**ACCEPTED HERE**

SEND BITCOIN PAYMENT TO THIS ADDRESS:

15WB1myEiqjZ299duP1ybzh8KFSMJWzBdQ

**DECRYPT FILES**

**EXIT**

\*Please note that early bird qualification is determined from the date that this tool was first run as recorded on our servers.

# Phishing

## BEWARE OF SCAMS!

EMAILS FROM THE CANADA REVENUE AGENCY WILL NEVER:



USE AGGRESSIVE  
LANGUAGE OR TONE



ASK FOR PREPAID  
CARDS OR BITCOIN



THREATEN ARREST  
OR SEND POLICE



ASK FOR  
FINANCIAL  
INFORMATION



For more information, go to [canada.ca/taxes-fraud-prevention](https://canada.ca/taxes-fraud-prevention)



Canada Revenue  
Agency Agence du revenu  
du Canada

Canada

# Distributed Denial of Service (DDoS) Attacks

V.I.P GOLD

BEST

**149.99\$**

⊕ XyZ VIP Network

⊕ 250-300Gbps Network Capacity

⊕ 26 Attack Methods

⊕ 8400(s) Stress Time

⊕ 1 Months Membership

⊕ 2 Parallel attacks

**REGISTER**

V.I.P DIAMOND

BEST

**299.99\$**

⊕ XyZ VIP Network

⊕ 250-300Gbps Network Capacity

⊕ 26 Attack Methods

⊕ 9600(s) Stress Time

⊕ 2 Months Membership

⊕ 2 Parallel attacks

**REGISTER**

V.I.P METAL

BEST

**449.99\$**

⊕ XyZ VIP Network

⊕ 250-300Gbps Network Capacity

⊕ 26 Attack Methods

⊕ 10800(s) Stress Time

⊕ 3 Months Membership

⊕ 2 Parallel attacks

**REGISTER**

# Infrastructure

*Buy your Domain Names with Bitcoin....*

Find your new domain name  Search Transfer

.com \$8.79 .me \$7.99 .pro \$5.99 .best \$3.99 .xyz \$2.99 .monster \$2.99

### SHARED HOSTING

The Next Generation Of Hosting Speed -- Security -- Scalability

From **\$4.76**/mo

[Choose Plan](#)

### RESELLER HOSTING

Reseller plans are designed for you to earn money!

GET FREE WHMCS

From **\$25.95**/mo

[Choose Plan](#)

### VPS HOSTING

Dedicated functionality, but without the expense.

From **\$14.99**/mo

[Choose Plan](#)

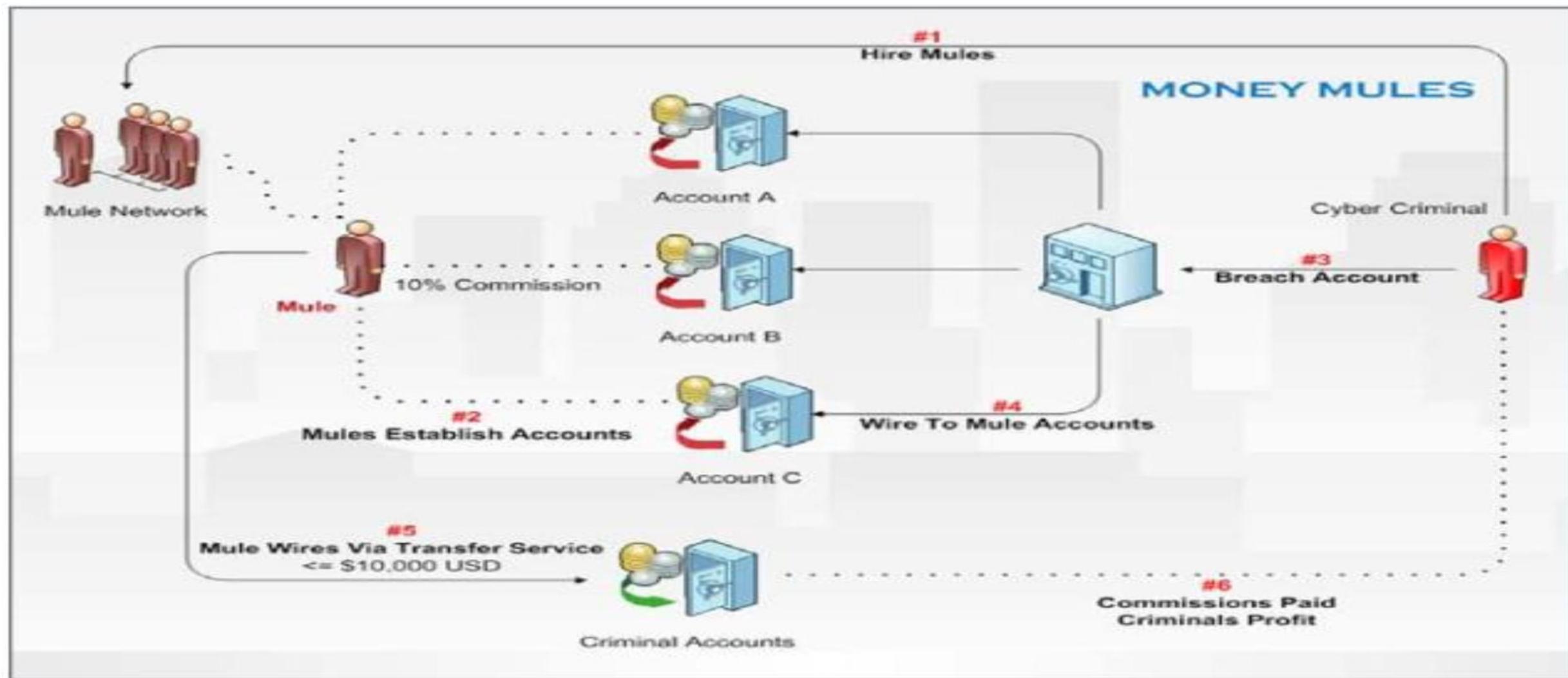
### DEDICATED SERVERS

Total control over your hosting configuration and environment.

From **\$93.79**/mo

[Choose Plan](#)

# Money Muling

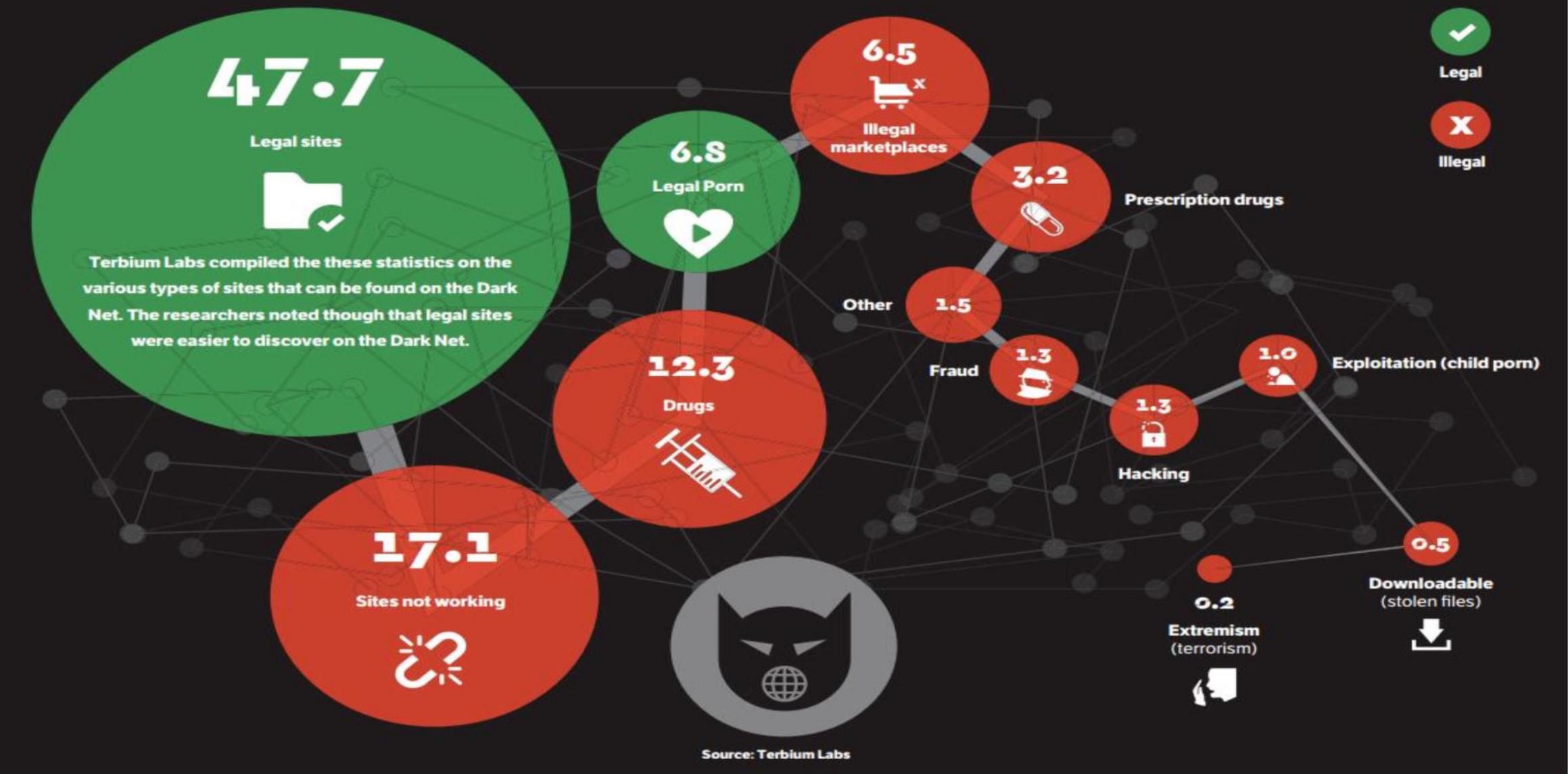


How Zeus botnet operators utilize money mules

# The Other tip of the Iceberg



## Dark Net: breakdown of sites available, by percent



# The Original Dark Market 2013



## Shop by category:

**Cannabis(162)**

**Ecstasy(33)**

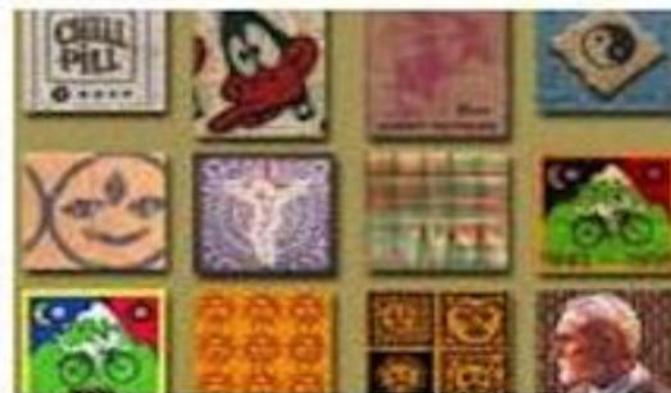
**Psychedelics(119)**

**Opioids(33)**

**Stimulants(56)**

**Dissociatives(6)**

**Other(199)**



1 hit of LSD  
(blotter)  
**\$1.13**



1/8 oz high  
quality cannabis  
**\$3.17**

## SILK ROAD PAYMENT SYSTEM



Buyer exchanges  
currency for BTC



**EXCHANGER**



Buyer transfers BTC  
to SR account



**BUYER**



Buyer makes purchase

BTC held in escrow  
until order finalized



Vendor exchanges BTC  
for currency



**EXCHANGER**

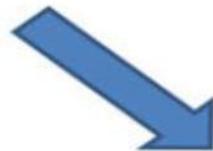


Vendor moves BTC  
from SR account



**VENDOR**

Vendor is paid



Silk Road takes  
commission



**GOVERNMENT  
EXHIBIT  
113 A**  
14 Cr. 68 (KBF)

# ALPHABAY TUTORIAL

# AlphaBay Market.net

## HOW TO GET AN ALPHABAY ACCOUNT

- \* Approximately 1,605.0503851 BTC was seized from Alexandre Cazes and moved to a US government-controlled address. (**Current Value approximately \$ 16,867,575.00 CAD**)
- \* 293.79476862 BTC was moved from the Alphabay server 3203 into a US government-controlled address.
- \* 43.05943697 BTC was moved from the Alphabay server 3164 into a US government-controlled address.



## Browse Categories

<input type="checkbox"/> Fraud	4425
<input checked="" type="checkbox"/> Drugs & Chemicals	9131
<input checked="" type="checkbox"/> Benzos	696
<input checked="" type="checkbox"/> Cannabis & Hashish	2664
<input checked="" type="checkbox"/> Dissociatives	187
<input checked="" type="checkbox"/> Ecstasy	1087
<input checked="" type="checkbox"/> Opioids	732
<input checked="" type="checkbox"/> Prescription	878
<input checked="" type="checkbox"/> Steroids	196
<input checked="" type="checkbox"/> Stimulants	1652
<input checked="" type="checkbox"/> Tobacco	73

## Search Results [Save Search]



SAMPLE / 1 gram MDMA 84% pure crystals  
Item # 2873 - Ecstasy - BlackFriday (123)

Views: 13855 / Bids: Fixed price  
Quantity left: 33



1 box (28 tabs) CRESCENT pharma uk diazepam/valium  
Item # 3112 - Benzos - ukvaliumsupplier15 (182)

Views: 3238 / Bids: Fixed price  
Quantity left: Unlimited



15 Oxycodone @ \$26 each = \$390  
Item # 4617 - Opioids - dealsthatarerereal (249)



### Submachine VZ.58 (AK-47) "Promotion to get new feedback's"

\*I no have more in stock for immediate sending. but I will be more next week\* Promotion to get new feedback's I sell these submachine to € 3,000 now with 60% discount. the first that I sell, getting each at a price of € 1,800 . \*I no have more in stock for immediate sending. but I will be more next week\* I accept to sell ESCROW See conditions below.

Sold by s9871 - 0 sold since Apr 17, 2015

Level 1

Features

Product class

Physical package

Features

Spain

Quantity left

Unlimited

Europe

Ends in

50 days

Brazil

Payment

Escrow

Europe post - 8 days - USD +27.50 / item

Purchase price: USD 2,065.41

Qty: 1

Buy Now

8.9652 BTC

**LEAVE NOW**

**OR**

**ENTER DARK WEB**

# Ease of Use

## DARK WEB EXPLORATION

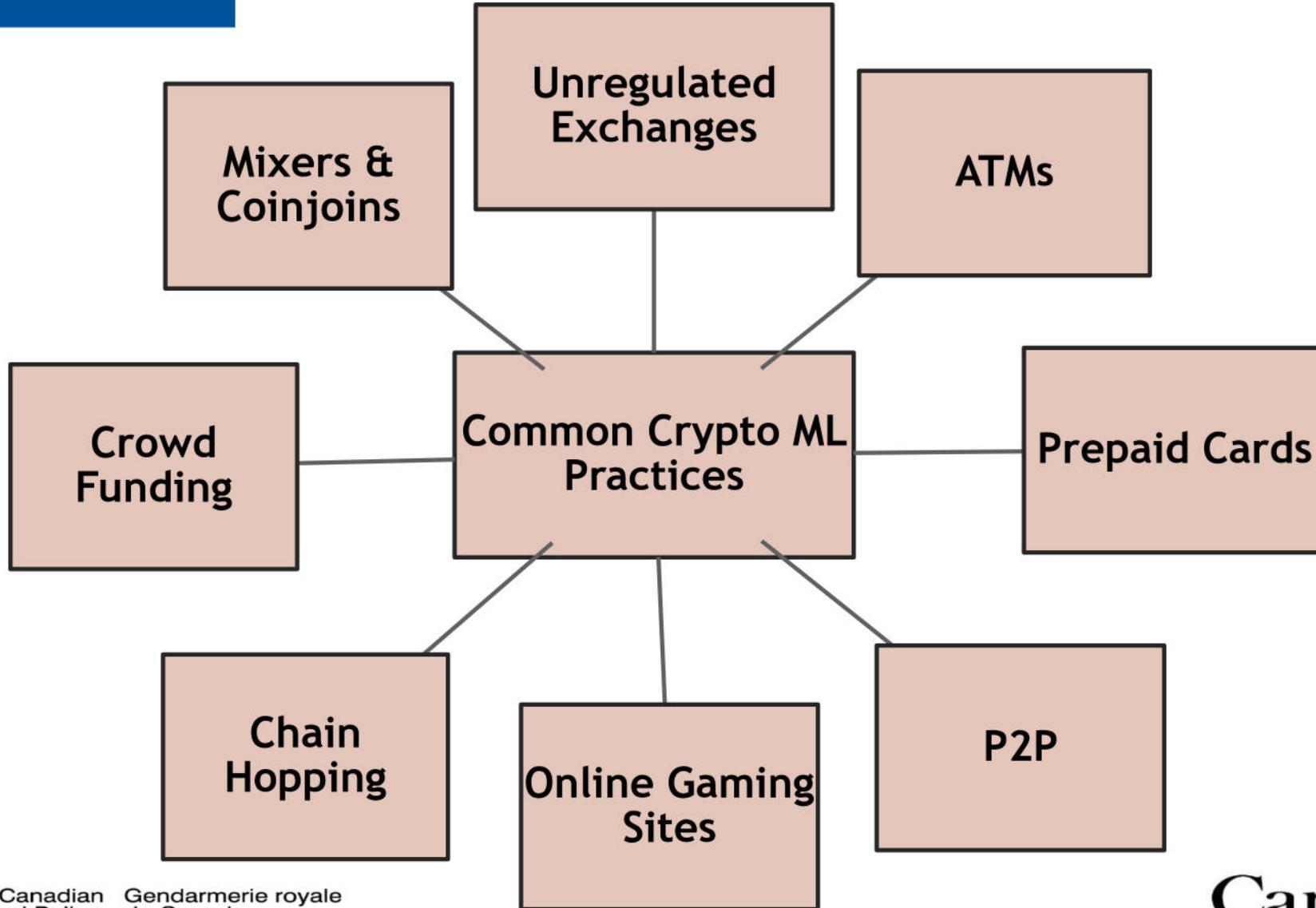


# Anonymizing measures for Bitcoin can include:

- The use of Virtual Private Networks/proxy servers
- The Onion Router (TOR)
- Online personas
  - create an online personality to facilitate their online criminal activities
- Money Laundering practices to help obfuscate the source of funds....



# Common Money Laundering Practices Using Crypto



# Money Laundering Practices

## Unregulated Exchanges

- Specifically seeking out exchanges in countries with little to no AML regulations or KYC requirement

## Peer to Peer

- Exchange cash for cryptocurrency
- Exchange funds for prepaid cards, gift cards or other cryptocurrencies
- Provide private keys offline

## Online Gambling & Gaming Sites

- Crypto can be used to buy credit or virtual chips which users can cash out again after just a few transactions



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# Online Gambling

1



## Complete Privacy & Anonymity

Since you don't have to fill in any personal information, Bitcoin casinos like FortuneJack can offer you complete privacy and anonymity.

This is a huge benefit for users who don't wish to share personal data or reveal their identity.

4



## Your Funds are Completely Secure

With traditional online payment methods like PayPal, if your online casino gets hacked, your financial data is put at risk. With Bitcoin, this isn't an issue. As long as your funds are kept in cold storage behind strong passwords, they'll be highly secure.

2



## Instant Transactions

No waiting around - with Bitcoin gambling, you can deposit and withdraw your money instantly as 3rd party verification isn't required.

5



## Rock-Bottom Fees

Since no 3rd parties are involved in depositing and withdrawing funds, the fees for Bitcoin gambling are often extremely low - or altogether non-existent.

With Bitcoin gambling, everybody wins.

3



## They're Proven to be Fair

Concerned computer algorithms are bending the rules behind the scenes?

With a Bitcoin casino, fairness isn't something you need to worry about. At FortuneJack, the latest gambling technology ensures games are completely balanced and fair.

6



## There are No Withdrawal Limits

Bored of only being able to deposit and withdraw certain amounts at a time?

Since there's no central authority controlling your money, Bitcoin casinos eliminate these restrictions. Deposit and withdraw as much as you like, whenever you want.

# Money Laundering Practices

## ATM's

- Not linked to banks. Potential for little KYC. Criminals can exploit loopholes and weaknesses in cryptocurrency ATM management

## Prepaid Cards

- Avenue to spend funds. Can be used to fund illegal activity, traded for other currencies, or given to third parties

## Go Fund Me

- Frequent (small) deposits from **crowd funding or angel investor websites.** Fund with deposits from own cryptocurrency addresses



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# Crowdfunding & Terrorist Financing



## SamSam Ransomware:

- Extorted more than \$6,000,000 USD (hospitals, universities, Gov't. institutions)
- Two BTC addresses added to the Office of Foreign Assets Control (OFAC) List.

- Hamas Al-Qassam Brigades Bitcoin Video
- Al Qaeda charity
- ISIS facilitator - PPE equipment



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# Money Laundering Practices

## Chain Hopping

- convert cryptocurrency such as bitcoin into other coins to create a money trail that is exceedingly difficult to trace

## Mixers

- Process of utilizing a 3<sup>rd</sup> party service to break the connection between the address sending the coins, and the address they were sent to

## Coinjoins

- A peer-to-peer solution to mixers that removes the 3<sup>rd</sup> party intermediary



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# ML/TF Indicators

- Funds deposited into an account from a cryptocurrency exchange followed by rapid depletion via cash, email, or wire transfers
- Multi-ATM cash deposits with immediate credit to a virtual/crypto-currency exchange (smurfing)
- Frequent deposits/withdrawals from cryptocurrency exchanges
- Unusual 3rd party deposits, often structured in nature, from online wallets or payment processors (use of money mules)
- Prolonged meets in vehicles with smartphone



# Honourable mention: Real Estate?

4504B SOUTHRIDGE CRESCENT Langley, British Columbia  
V3A4N6



For Sale Residential

\$1,998,000 CAD or  
equivalent BTC - House

This immaculate 7 bedroom, 8 bathroom luxurious designed home is a gem...

More Details ▶

5698 sq ft

7 Bedrooms

8 Bathrooms

3 Garages

Bromont 4BR Home Facing The Olympic Equestrian Center With Private Acreage



For Sale Residential

\$700,000 In USD or Crypto Equivalent (BTC, ETH, XRP, EOS, and LTC) - Acreage With Home

For Horse lovers and Outdoors Enthusiasts! Here we are facing the Bromont...

More Details ▶

130,674 sq ft

4 Bedrooms

2 Bathrooms

Mountain Top Land Right Next To Ski Chantecler



\$15,169 USD or BTC - Lots

Only 45 minutes from Montreal, the land is located in a sector...

More Details ▶

30726 2 854 m<sup>2</sup> (30 726 sq ft)

Ranch Canada, 30 Min From Montreal, 36.7 Acres



\$899,000 - Acreage With Home

Fertile land drained of 25 acres, 1 garage 26x36 and one garare...

More Details ▶

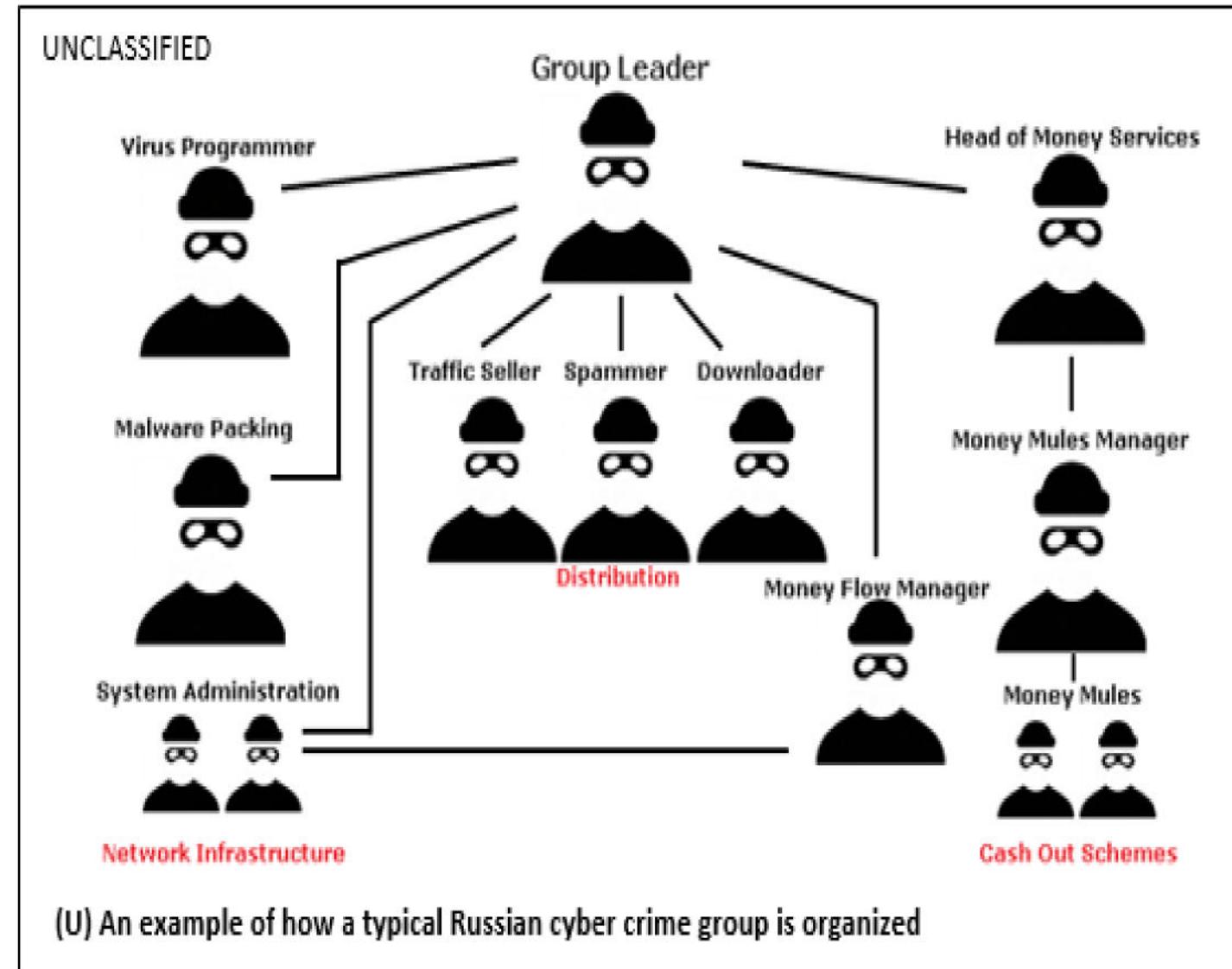
5 Bedrooms

3 Bathrooms

2 Garages

# Investigative Challenges

- New & complicated criminal schemes
- New tools and levels of expertise required
- New structures of organized crime groups.....



# RCMP virtual asset investigations



# Responses to Lessons Learned

- RCMP National Cryptocurrency Coordinator
- Guidelines/Policies
- Training at all levels
- Collaboration & sharing of expertise/capabilities:
  - Virtual Currency Working Group
  - National Cybercrime Coordination Centre
  - Canadian Anti-Fraud Centre
  - Partnerships with GoC, International Partners, Private Sector
- Management of Assets:
  - Seized Property Management Directorate (SPMD)



# Cryptocurrency Seizures



# Gaps & Barriers

- Tracing: Obfuscation techniques & privacy coins
- Legal Tools

# Moving Forward

- Federal Cybercrime Operations Group
- PCMLTFA Amendments:
  - What does this mean for law enforcement?



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