

# Canada and china: cybercrime and cryptocurrency

[Technology](#), [Computer](#)



Bitcoin, Cyber-crime, Cryptocurrency, Canada, China.

Cyber-crime is a byproduct of the information age and is growing very fast worldwide (FBI, 2017). As technology has advanced so have the criminal's methods to exploit the internet. Cyber-crime can be described as the use of a computer, a network or other electronic device to facilitate a crime, Interpol makes a distinction between two types of cyber-crime (INTERPOL, 2017):

Advanced cyber-crime - attacks on computer software or hardware;  
Cyber-enabled crime - financial crimes, crimes against children and terrorism are more prevalent since the introduction of the internet.

These types of crime in the past would have been likely to be conducted by small groups or even individuals, but new trends according to Interpol show organized criminal gangs worldwide have embraced technology to further their profits be it from illegal gambling, sale of fake goods, theft, fraud etc.

Since 2009 the criminals now have a new virtual currency also labelled as a cryptocurrency called Bitcoin which is used by many to conduct transactions on what has become known as the dark web. The dark web can only be accessed through encryption software and this area of the internet is largely un-policed and users can remain anonymous. The anonymity is an ideal scenario for the criminal to work in.

This paper will discuss firstly the give a brief overview of cyber-crime and the origins of bitcoin in more detail. Secondly how this electronic currency technology is being used for legal and illegal purposes. And lastly how

<https://assignbuster.com/canada-and-china-cybercrime-and-cryptocurrency/>

governments around the globe are trying to regulate this electronic currency, with a major focus on the Canadian government and Bill C-31.

Criminality is nothing new it has been part of lives for centuries, crime as such has not changed over the years only the tools used to carry them out have developed. Criminals have learned to use technology to hide themselves in the shadows and use technology to further profit. The biggest technological advancement in the last thirty years has been the internet. The internet has revolutionized our lives in so many ways from ease of communications, e-commerce to the large wealth of knowledge on line. Cyber-crime comes in many forms but it is primarily aimed at computers, computer infrastructure and other connected devices. With the large spread of the internet and smartphones, now nearly 3.2 billion people on the planet have access to the internet (ITU, 2015).

It increases the pool of people that criminals have access to. When this is compared to decades ago when computers were only used by government agencies, research and financial institutes, crime in this area was limited to those who had the expertise and access to these devices (Clough, 2015). Now a small group can conduct crimes on a global scale without the restrictions of physical location to perform the crime.

Bitcoin is an electronic virtual currency that allows users to conduct transactions between themselves (peer to peer) over an electronic network without the need for a third party namely a financial institution (Nakamoto 2008). Bitcoin was released in January 2009 by Satoshi Nakamoto which

there is little known about as this was an alias used by the inventor (Powers 2014).

The Bitcoin software is open source and in order to use the currency a user must obtain a wallet, there are two common types of wallets. Firstly the software wallet and the secondly the mobile wallet (Bitcoin 2017). The software wallet is mostly stored on a user's hard drive, with the mobile wallet being stored on mobile devices such as android phones, IOS phones and tablets, giving the user the flexibility of have a currency attached to a mobile device.

These wallets contain both a public and private key, the public key is what a user will share with other Bitcoin users in order to have them send bitcoins over the internet, whereas the private key is used by the owner of the bitcoins to make payments from the wallet (Miller 2015).

The back bone of this cryptocurrency is the public ledger called the blockchain, this ledger records who owns what bitcoins and records transactions that take place. No one controls or owns the blockchain it's all in the public domain. Transactions on the blockchain can't be reversed, the blockchain is only written too and are confirmed by the peer to peer network. Nakamoto has placed a limit of just under 21 million bitcoins, once that limit is reached, no more bitcoins can be made.

Bitcoin is viewed as being the electronic equivalent of cash, as no financial institutes are involved no personal information is required when creating a personal wallet or purchasing Bitcoins. This anonymity has drawn scrutiny

from some sectors to Bitcoin because some criminals have adopted the currency instead of conducting business in more traditional financial ways (Miller 2015).

Just like any currency, Bitcoin can be used to purchase many of the everyday things in life the same way that we use traditional cash or credit cards. You can transfer Bitcoin to relatives, donate to charity, and this was what Bitcoin was created for to be a replacement for current systems. The first Bitcoin ATM was opened in Vancouver, Canada in 2013. In its first week of operation, the ATM performed over 10, 000 independent transactions with a third of users being first time Bitcoin buyers (Wagner 2013).

Across the world, entire city areas are accepting this cryptocurrency Bitcoin as payment for a range of goods and services. In the Germany City of Berlin, the borough of Kreuzberg, has the highest number of businesses accepting Bitcoin on the planet. This is expanding across the globe because every day more and more businesses are authorizing Bitcoin as a means of payment (Small 2015).

Kirkpatrick (2017) refers to an interview with David Decary-Hetu, an adjunct professor of criminology at the University of Montreal, " There are many helpful and legal reasons for having bitcoin," Decary-Hetu says, noting that large established companies such as Dell Computer, Expedia, Microsoft, and PayPal, each accept bitcoin, and are clearly not dealing in illegal goods.

Small (2015) stated the total market value of the Bitcoin currency is currently estimated at slightly below \$7. 6 billion. The main argument for the

regulation of virtual currencies and Bitcoin is that because of the anonymity offered to the buyer of such currencies, criminals have advantage over law makers and law enforcement.

This anonymity helps obscure the identities of those purchasing drugs, money laundering, illegal paraphernalia and terrorist financing with the use of Bitcoin. Kirkpatrick (2017) again in his interview with Decary-Hetu says “ There is no way to tie your identity to your online bitcoin wallet address, if you do it properly,” noting that when users try to convert cryptocurrencies to traditional money they may lose that anonymity. “ That’s where sloppy people are going to get arrested.

## China

In China, the government banned Bitcoin in December 2013. The People’s Bank of China does not give Bitcoin any legal status, refuses to recognize it as a currency, and has misgivings about Bitcoin as a central authority does not regulate it (Ponsford 2015). This was not always the case as in May 2013, the Chinese government unofficially gave its blessing to the currency when the government sponsored a documentary that was shown on state television to inform the public about Bitcoin (Small 2015).

Because of the interest that came from the documentary, a surge of Chinese clients downloaded Bitcoin software, more than any other country for the last seven months of 2013. Before the ban, China accounted for the most Bitcoin exchanges and as a result Bitcoin’s value plummeted nearly twenty percent in a single day after the announcement (Small 2015).

## Canada

In Canada, the government in 2014 stated that Bitcoin was not legal tender. The government however did state that it was a payment system (George-Cosh 2014) and as such should be taxed as a commodity when Bitcoin is exchanged for Canadian currency.

Canada was the first jurisdiction in the world to pass concrete legislative measures to deal with Bitcoin and other virtual currencies. Bill C-31 was passed into law in June 2014, which made reporting requirements on the use of virtual currencies like Bitcoin. These measures are similar in nature to regulations on other financial transactions in the country.

Bill C-31 made it law that Bitcoin be regulated as a money services business, requiring users to register with the Financial Transactions and Reports Analysis Centre of Canada (FINTRAC). These Bitcoin regulations would apply to both domestic and international Bitcoin operators (Ponsford 2015).

The summary of Bill C-31 stated (in part):

Division 19 of Part 6 amends the Proceeds of Crime (Money Laundering) and Terrorist Financing Act to, among other things, enhance the client identification, record keeping and registration requirements for financial institutions and intermediaries, refer to online casinos, and extend the application of the Act to persons and entities that deal in virtual currencies and foreign money services businesses [emphasis added].

Legislation that specifically altered the definition of money services business stated: (4) If subsection 256(2) comes into force, then on the latter of January 1, 2015 and the day on which that subsection comes into force,

' money services business' means an entity

(a)(iv) dealing in virtual currencies, as defined by regulation

Other legislative provisions incorporated virtual currency language, including foreign businesses directing services at a Canadian person or entity. This legislation has had effects on Bitcoin use in Canada, because firstly it regulates virtual currency as a money service business; secondly imposes registration with FINTRAC to combat money laundering and terrorist financing; thirdly extends to both users inside and outside of the jurisdiction, or services within Canada; fourthly prevents banks from dealing with unregistered users (Ponsford 2015).

## References

bitcoin. org (2017). Available: <https://bitcoin.org/en/choose-your-wallet>. Last accessed 18/03/2017.

Calumn Jeffrey and Tobias Feakin. (2015). Underground web. *ASPI Special Report* . March 2015.

Daniel Miller. (2015). *Bitcoin explained: the digital currency making millionaires*. Available: .



David George-Cosh. (2014). *Canada Says Bitcoin Isn't Legal Tender*.

Available: <http://blogs.wsj.com/canadarealtime/2014/01/16/canada-says-bitcoin-isnt-legal-tender/>. Last accessed 12/03/2017.

Dr. Mike McGuire (University of Surrey) and Samantha Dowling (Home Office Science). (2013). Cyber-dependent crimes. *Cyber crime: A review of the evidence* . p4-p5.

FBI. (unknown). *What we Investigate*. Available: .

Jeffery Powers. (2014). *January 3, 2009: Bitcoin Introduced, 1983: Computer - Machine of the Year*. Available: <http://dayintechhistory.com/dith/january-3-2009-bitcoin-introduced-1983-computer-machine-year/>. Last accessed 19/03/2017.

Jonathan Clough (2015). *Principles of Cybercrime* . 2nd ed. Cambridge: Cambridge University Press. p6.

Keith Kirkpatrick. (2017). Financing the Dark Web . *Communications of the ACM* . 60 (3), p21-p22.

International cyber security protection alliance. (2012). Detailed Findings. *Impact of cyber crime on businesses in Canada* . ICSPA (4), p3, p16.

INTERPOL. (2017). *Cybercrime*. Available: <https://www.interpol.int/Crime-areas/Cybercrime/Cybercrime>. Last accessed 18/02/2017.

International Telecommunication Union. (2015). ICT revolution and remaining gaps. *ICT Facts and Figures 2015* , p1.

<https://assignbuster.com/canada-and-china-cybercrime-and-cryptocurrency/>

Kurt Wagner. (2013). *World's First Bitcoin ATM Opens In Vancouver, Canada*. Available: <http://mashable.com/2013/10/30/bitcoin-atm-2/#HUU2o4zadsq7>. Last accessed 18/03/2017.

Matthew P. Ponsford . (2015). A Comparative Analysis of Bitcoin and Other Decentralised Virtual Currencies: Legal Regulation in the People's Republic of China, Canada, and the United States . *Hong Kong Journal of Legal Studies - Volume 9 (2015)* . p51-p70.

Satoshi Nakamoto. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System.

Stephen Small. (2015). BITCOIN: THE NAPSTER OF CURRENCY. *HOUSTON JOURNAL OF INTERNATIONAL LAW* . 37 (2), p585-p640.