

Crypto Currency and Cybercrime

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Abstract: Cryptocurrency is a kind of encrypted data string that denotes a unit of currency or money . But unlike the physical money cryptocurrencies are decentralized and has counterfeit-proof. It is organized in blockchain network, also called peer to peer network, serves as a ledger of transaction, e.g., buying ,transferring etc. and for issuing new units. Bitcoin, Ether, Litecoin, and Monroe are popular cryptocurrencies. Hundreds of cryptocurrencies exist in today’s world, several cryptographic technologies are combined to make this possible but most of them are implemented on the 1st Cryptocurrency, Bitcoin. Fifteen years ago, monetary transactions couldn’t be imagined without physical mechanism. Countries has come long way in reshaping financial access making digital payments a reality. Though still in development it has been proven as modern system of payment (Technically, there is neither a ban on cryptocurrencies nor a regulation in India). And innovation like cryptocurrencies drive society forward but they do not occur in vacuum. Public policy can create background condition in which its innovative spirit is suppressed and can be manipulated to a negative outcome. And if technological speed and digital advancement not matched with adequate safety aspects, could become genuine burden for regulators and get commonly associated with illicit activities e.g., money laundering etc. Thus we analyze the features which convert Cryptocurrency in convenient tool to perform any transactions far from regulation that govern their actual usage and pinpoint fields in which new illicit behaviors are derived from their usage.

Scholars have recommended to establish crypto standards to address some of these concerns. These standards offer benefits like security, consumer protection etc. However crypto standards won’t be enough to direct all of the practices discussed in this paper. An additional veneer of muscular investors and consumer protection may be required for providing a comprehensive structure to direct regulation of Cryptocurrency.

Keywords: Cryptocurrency, digital assets, crypto jacking, financial regulation, bitcoin, virtual pickpocketing, Silk Road, digital money, fraud speculation

Introduction

Cryptocurrency are subject of virtual currency so called digital currency that is used as a medium of exchange. Cryptocurrency sometimes called as crypto is a form of digital currency which uses cryptography to secure the transactions. The phenomenon is neither new nor recent discovery. There are hundreds of cryptocurrency in today’s era but most of them are implemented on the very first cryptocurrency that is Bitcoin. Bitcoin was created out of the turmoil of the great recession of 2008 as distrust of banks and their role in the financial system grew with the passage of time. Today, digital currency is reality and bitcoin is one of the most popular currency that scholars and advocates believe will replace the physical currency one day. Investors are optimistic about the development that have been made since the crypto inception although they are still not perfect, the growth has railed a fervent community that is excited about the rise of cryptocurrency as it will lead to new opportunities to the businesses and investors. Fifteen to twenty years ago, we couldn’t have imagined monetary transactions without actual money , physical currency : notes, coins, cheques etc. But India has come long way in reshaping financial access using digital mediums. As the digital finance sector is advancing at a breakneck speed, conventional regulations and guidelines need to be put in charge. As there are several high-profile cases of hacking associated robbery, virtual pickpocketing of customer’s fund.

The colonist crypto Bitcoin will be used as a replica Cryptocurrency in this paper to light its market superiority and crimes.

Distribution Concordat

Bitcoins can be purchased and sold both on-and offline. Parties offer buying and selling of bids in online bitcoin exchange. It is monitored and organized by peer-to-peer network called a blockchain, which serves as a secure ledger of transaction. Technically, there is neither a ban on the use of cryptocurrencies nor any kind of regulation in India. In its current form, the cryptocurrency and regulations of Official Digital Currency Bill aims to ban all cryptocurrencies as payment method in India, barring a few private coins to promote underlying technologies, even as it allows the Reserve Bank of India to set up an official digital currency.

Associated Cybercrime

Bitcoins, cryptocurrencies maintain an association due to lack of internal security and its decentralized form its popularity with the black market. Its undecided legal status makes it an absolute and alluring opportunity for money launderers and people committing crime. Therefore, it is natural for regulators to have genuine worries around techfin practices, anti-trust issues , cybersecurity risks, too big to fail issues, and challenges around data privacy . The regulator needs to balance the negative outcomes with the positive outcomes of the emerging technologies or else the positive outcomes will be suppressed by the negative outcomes especially when these technologies also have effective bearing on the market and can influence the way monetary markets operate. The regulators also have role in ensuring adequate consumer protection guard rails in place, as these crimes can begin to be a risk on national security of country and supervisory burden on global financial regulators.

Prospective of Cybercrime

Money laundering and illegal traffic

The market using online entertainment program to regulates dinner all monetary system to hide money and exploit innocent people is not something new. Through using bitcoins or Cryptocurrency both buyers and sellers hide their identity by transferring big amount of money behind proxy or other anonymous systems.

Giving great number of transactions from great number of people which makes it difficult to track the real owners, the criminal mind is impossible to track.

And this kind of money is used for selling and buying of drugs through Cryptocurrency and the same kind of crime was associated on the Silk Road also known as amazon of drugs, where Cryptocurrency is use for transaction of drugs. This process increases the anonymity by means of dark market operations with cyber walls in the cloud also called as e-wallet

In the current time also, there are several cases such as the domain for BTC-e has been seized. They operated as a globally unlicensed money exchange to launder criminal proceeds from virtual money to physical money.

Virtual pickpocketing

Cryptocurrencies make their coins stored in the form of data, files which fir easy accessibility are also stored in alternative computer or devices so there would not be any loss because of system failure. And any other device with logical access to datafiles can execute any kind of transactions if the files are not protected properly. And the advance encryption standard is available to any user as it is given in protocols and there are always threats of stealing these files.

In this line criminals have found a way to design and operate in the dark using victims shadow so their real identity isn't exposed to obtain illegal benefits easy to monetize

I am the case study of alpha bay in July 2017 they hid their location and identities and used cryptocurrencies to facilitate hundreds and millions of dollars as a conduit for everything like drugs sale and firearms to mallard and toxic chemicals

Unauthorized use of computing power

Also using unauthorized process to produce bitcoins by using fewer indicators as possible. Which makes it difficult for the expert and authorized user to notice the symptoms unless it is checked manually.

By doing the illicit activities any botmaster could take the benefit of actual user by increasing the electric bill artificially.

On July 22, 2020 an illegal currency money service business Herocoin was established which builded a networking at gas stations, malls throughout California and allowed customers to exchange cash for bitcoins and vice versa including proceeds of criminal activity upto 25 million dollars

Peel chain

The investigation proved that the criminals laundered the funds illicitly obtained from hacking several addressing intermediaries and other virtual currency exchanges. And in this slightly smaller amount of cryptocurrency is transferred into new address

In the latter case 100 bitcoins in an exchange were forwarded in a series of 20 peels in inconsistent amount to make the underlying transaction difficult to track.

Corporate espionage

It provides a sophisticated tool to those who can steal intellectual property and assets that are future economic assets and create global and national drawback. Testimony reveals that many illicit cyber services which include corporate espionage are bought with cryptocurrencies.

Child exploitation

Migration of commercial child sexual exploitation which includes the form of sex trafficking and abusing pictures of children are bought with cryptocurrencies as they hide the identity of the seller and buyer and pages like dar webs and many illicit sites are run through this.

REFERENCES

[1] Bitcoin: A Peer-to-Peer Electronic Cash System, white paper, Satoshi Nakamoto, 2008. [Online], Available:

<https://bitcoin.org/bitcoin.pdf> [Accessed: Jun. 16, 2015].

[2] <http://coinmarketcap.com/currencies/bitcoin/#markets>

[3] Virtual Currencies: Bitcoin & What Now After Liberty Reserve, Silk Road, And Mt. Gox? [Pre-Publication Draft], Lawrence J. Trautman [Online]

[4] <https://www.cryptocoinsnews.com/cryptocurrency/>

[5] Cryptocurrency:Counterfeit-Proof, ecentralized Transactions, Max Pittsley, pp. April 28, 2014

[6] Bitcoin, Cybercrime and Future Regulation, IBA Annual Conference Tokyo October 2014, Monty Raphael QC Special Counsel [Online]

[7] [http://www.petersandpeters.com/sites/default/files/publications/Bitcoin, %20Cybercrime%20and%20Future%20Regulation.pdf](http://www.petersandpeters.com/sites/default/files/publications/Bitcoin,%20Cybercrime%20and%20Future%20Regulation.pdf)

[8] Issues and Risks Associated with Cryptocurrencies such as Bitcoin, The Second International Conference on Social Eco-Informatics, Félix Brezo and Pablo G. Bringas, 2012

[9] <https://en.wikipedia.org/wiki/Bitcoin>

[10] Bitcoin, Working Paper, Rainer Böhme, Nicolas Christin, Benjamin Edelman, Tyler Moore, draft as of July 15, 2014. [O