

Bitcoin Basics and the Problem Gambling Connection: Part 1



Youth Gambling Awareness Program

YMCA of Greater Toronto

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Bitcoin Basics and the Problem Gambling Connection, Part 1

This is a two-part series exploring an emerging topic, Bitcoin. Part 1 will introduce terminology to effectively explain what Bitcoin is. Part 2 will investigate the nexus between digital currency and problem gambling, including offering prevention measure suggestions.

Digital Currency¹

A type of currency available only in digital form; it is not tangible (unlike cash, coins, and bank notes). It exhibits properties similar to physical currencies, but allows for instantaneous transactions and borderless transfer-of-ownership. This type of currency can generally be used to purchase actual goods and services and is often utilized for social media or online gaming communities.

Cryptology

The use of mathematical equations (like algorithms) to keep virtual information safe from hacking, being misdirected, or altered (Azad and Pathan, 2015).

Cryptocurrency²

Cryptocurrencies are digital currencies that use cryptology and hard to break computerized algorithms and techniques for secure communication in the presence of third parties.

Blockchain³

A digitized, decentralized public ledger of all cryptocurrency transactions. Each time a transaction happens, a block of information gets generated that has complete details about different user addresses and their balances right from the original transaction to the most recently completed. There are countless numbers of such blocks in the blockchain, connected to each other (like links in a chain) in proper linear, chronological order. Each computer connected to the network gets a copy of the block (each transaction). This technology allows market participants to keep track of digital currency transactions without central recordkeeping. Each record's authenticity can be verified by the entire community of users instead of a single centralized authority. The blockchain confirms the transactions did happen legitimately.

¹ https://en.wikipedia.org/wiki/Digital_currency

² <https://en.wikipedia.org/wiki/Cryptocurrency>
<https://blockgeeks.com/guides/what-is-cryptocurrency/>

³ <https://www.investopedia.com/terms/b/blockchain.asp>

Bitcoin⁴

Bitcoin began operations in 2009 and touts itself as an “innovative payment method and new kind of money” (2018). It was the first cryptocurrency that used a decentralized public ledger, blockchain, and a peer to peer system to record all bitcoin transactions. The invention of the blockchain for bitcoin made it the first digital currency to solve the double spending problem without the need of a trusted authority or central server. Since its inception, over 62 million transactions have been made between more than 109 million accounts ((Bohme, Christin, Edelman, & Moore, 2015). The list of cryptocurrencies available over the internet is growing, creating a competitive environment. By market capitalization, Bitcoin is currently the largest blockchain network followed by Ethereum, Ripple, Bitcoin Cash, Cardano and Litecoin.⁵

Mining a Bitcoin⁶

Paper money is printed and distributed by a government. As there is no central government for Bitcoin, miners use special software to solve math problems and are issued a certain number of Bitcoins in exchange. This process costs power; meaning it requires hardware, time and energy. Mining a Bitcoin provides a smart way to issue the currency and also creates an incentive for more people to mine.

Bitcoin Wallet⁷

A software program that acts like a digital wallet. Wallets enable the user to create a Bitcoin address for sending and receiving the Bitcoins. Instead of storing Bitcoins, it stores a secure private key to access Bitcoin addresses and carry out transactions. The four main types of wallet are desktop, mobile, web and hardware.

Where Bitcoin is accepted?

A growing list of companies accept Bitcoin as a form of currency for purchasing product or stocks, and for online play. A few examples are food chain Subway, online retailer sites like Overstock and Shopify, large media outlets including Chicago Sun Times, Wordpress, Microsoft, and gaming websites such as Humblebundle and BigFishGames. Being able to earn Bitcoins through mining is incentive to participate in activities offering this option because Bitcoins can be converted to usable currency. The more Bitcoins you earn, the more products you can purchase, more games you can play, or more currency you can convert.

Questions to Be Answered in Part 2

- Legalities of Bitcoin and cryptocurrencies
- How does the world of digital currency impact online gaming and gambling?
- Is Bitcoin a gambling activity?
- What prevention measures can be put in place?

⁴ <https://en.wikipedia.org/wiki/Bitcoin#Blockchain>

⁵ https://en.wikipedia.org/wiki/List_of_cryptocurrencies

⁶ <https://www.bitcoinmining.com/>

⁷ <https://www.investopedia.com/terms/b/bitcoin-wallet.asp>

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