**Blockchain**

a digital ledger in which transactions made in bitcoin or another cryptocurrency are recorded chronologically and publicly.

**8 Benefits of Blockchain to Industries Beyond Cryptocurrency**

**1. Supply chain management.**

For supply chain management, the blockchain technology offers the benefits of traceability and cost-effectiveness. Put simply, a blockchain can be used to track the movement of goods, their origin, quantity and so forth. This brings about a new level of transparency to B2B ecosystems -- simplifying processes such as ownership transfer, production process assurance and payments.

**2. Quality assurance.**

If an irregularity is detected somewhere along the supply chain, a blockchain system can lead you all the way to its point of origin. This makes it easier for businesses to carry out investigations and execute the necessary actions.

A use-case for this is in the food sector, where tracking the origination, batch information and other important details is crucial for quality assurance and safety.

**3. Accounting.**

Recording transactions through blockchain virtually eliminates human error and protects the data from possible tampering. Keep in mind that records are verified every single time they are passed on from one blockchain node to the next. In addition to the guaranteed accuracy of your records, such a process will also leave a highly traceable audit trail.

Of course, the entire accounting process also becomes more efficient on a foundational level. Rather than maintaining separate records, businesses can only keep a single, joint register. The integrity of a company’s financial information is also guaranteed.

**4. Smart contracts.**

Time-consuming contractual transactions can bottleneck the growth of a business, especially for enterprises that process a torrent of communications on a consistent basis. With smart contracts, agreements can be automatically validated, signed and enforced through a blockchain construct. This eliminates the need for mediators and therefore saves the company time and money.

**5. Voting.**

Just like in supply chain management, the promise of blockchains in the aspect of voting all boils down to trust. Currently, opportunities that pertain to government elections are being pursued. One example is the initiative of the government of Moscow to test the effectiveness of [blockchains in local elections](https://www.coindesk.com/blockchain-voting-code-made-open-source-moscows-government/" \t "_blank). Doing so will significantly diminish the likelihood of electoral fraud, which is a huge issue despite the prevalence of electronic voting systems.

Another example is when [NASDAQ](http://business.nasdaq.com/marketinsite/2017/Is-Blockchain-the-Answer-to-E-voting-Nasdaq-Believes-So.html) leveraged blockchain technology to facilitate shareholder voting. It worked with the joint efforts of their blockchain technology partner and local digital identification solutions, which provided governments with identity cards. After seeing success, they described the “e-voting” project as a practical, necessary and disruptive.

**6. Stock exchange.**

The notion of using blockchain technology for securities and commodities trading has been around for a while. Given the open-yet-reliable nature of blockchain systems, it isn’t surprising to hear that stock exchanges now consider it as the next big leap forward.

In fact, Australia’s stock exchange is already dead set on [switching to a blockchain-powered system](https://futurism.com/australia-stock-exchange-blockchain/) for their operations, which is designed by the blockchain startup Digital Asset Holdings. In a [press release](http://www.asx.com.au/documents/asx-news/ASX-Selects-DLT-to-Replace-CHESS-Media-Release-7December2017.pdf) published in December 2017, Blythe Masters, CEO of Digital Asset, said, “after so much hype surrounding distributed ledger technology, today’s announcement delivers the first meaningful proof that the technology can live up to its potential.”

**7. Energy supply.**

There are two types of businesses -- those that shrug off monthly utility bills and those who scratch their heads, wondering where their energy expenditures are coming from.

In certain parts of the globe, commercial establishments and households can now take advantage of blockchain-enabled “transactive grids” for sustainable energy solutions that accurately track usage. A couple of examples would be [Powerpeers](https://www.powerpeers.nl/about" \t "_blank) in Netherlands and [Exergy](https://lo3energy.com/) in Brooklyn. Blockchain can also be used to improve the tracking of clean energy. After all, once power is sent to the grid, no one can really discern if it’s generated by fossil fuels, solar energy or wind.

Traditionally, renewable energy is tracked through tradable certificates that are issued by the government. These certificates are, to put it bluntly, terrible in serving their purpose -- something that blockchain would have no trouble handling.

Related: [Why You Can't Afford to Ignore Cryptocurrencies and Blockchain Anymore](https://www.entrepreneur.com/article/301192)

**8.  Peer-to-peer global transactions.**

Finally, the meteoric rise of Bitcoin and every other cryptocurrency in the market isn’t without merit. For one, it enabled the fast, secure and cheap transfer of funds across the globe.

While there’s already a slew of services like [PayPal](https://www.paypal.com/) that process international payments, they usually require sizable fees per transaction. Other P2P payment services also have specific limitations, such as location restrictions and minimum transfer amounts. That’s why more businesses, as well as regular users, are beginning to prefer cryptocurrency for international transfers. Not only are they generally more secure, users are also granted more freedom when it comes to the movement of their funds. It’s clear that the blockchain is making strides into different industries outside of cryptocurrency. One could argue that most people aren’t ready yet for decentralized digital ledgers, but looking at blockchain’s progress thus far, it probably won’t be long before non-adopters follow suit.

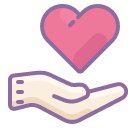
### Advantage of blockchain

The key advantages that Blockchain offers are:



#### Distributed

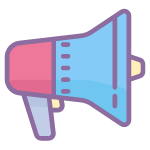
Blockchain allows a wide variety of computers to take part in a network, distributing the computing power. For example, Amazon buys and maintains a private set of computing power for AWS, no-one but Amazon can contribute this. In contrast the blockchain organisation [Ethereum](https://www.ethereum.org/" \t "_blank) allows almost anyone to contribute their computer to their network, simply by installing their software. Distribution helps to reduce risk in tampering, fraud and cyber crime. With more nodes able to take part, systems are very hard to “take down” via traditional brute force network attacks.



#### Trustless

Blockchain allows digital transactions to happen between parties who do not trust each other. Imagine a digital coin stored in a file on your computer. You may copy and paste the file an infinite number of times. The value of this digital currency would close to zero. In the past, central authorities (banks) have acted as ledgers, keeping records of the number of coins each of us has available as a centralised Ledger, to avoid the problem of duplication.

By distributing the Ledger to many Nodes, and synchronising this Ledger via Consensus, blockchain allows parties who don’t trust each other, to believe that the transaction is real and not worthless. Over time, trust can be increased further, via shared processes and immutable records of transactions. This facilitates a massive range of potential digital transactions that couldn’t have happened before without a central authority managing them.



#### Immutable

Once a transaction is agreed and shared across the distributed network it becomes close to impossible to undo. In fact, over time, it becomes harder and harder to undo. In a public ledger, like Bitcoin, this means that you can explore the blockchain and discover the number of Bitcoins in anyones account, or trace where funds were distributed to. In other scenarios, this could be used to track supply chains, or check who accessed certain files on a network.



#### Decentralised

Blockchain also supports the reduction in centralised monopolies or [“middle-men”](http://www.investopedia.com/terms/m/middleman.asp)and removes costs. By distributing networks blockchain can find economies of scale, without single centralised investment. This increases competition in the market, by lowering the barriers to entry, putting pressure on all participants to become more efficient. Added to this, allowing peers to transact with no requirement for trust disrupts the current business practices of organisations who facilitate trust e.g. Banks. Transactions directly between peers, may lead to reduction in “middle-man” steps, further increasing market efficiency.

### Dis advantage?

Blockchain is not without it’s weaknesses:



#### Wasteful

Every Node runs the blockchain in order to maintain Consensus across the blockchain. This gives extreme levels of fault tolerance, ensures zero downtime, and makes data stored on the blockchain forever unchangeable and censorship-resistant. But all this is wasteful, as each Node repeats a task to reach Consensus burning electricity and time on the way.

This makes computation far slower and more expensive than on a traditional single computer. There are many initiatives that seek to reduce this cost focusing on alternative means of maintaining Consensus, such as Proof-of-Stake.

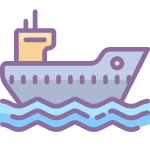


#### Network speed/cost

Blockchain networks require Nodes to run. But as many of the networks are new, they lack the number of Nodes to facilitate widespread usage. This lack of resource manifests as:

* **Higher costs** — as Nodes seek higher rewards for completing Transactions in a Supply and Demand scenario
* **Slower transactions** — as Nodes prioritise Transactions with higher rewards, backlogs of transactions build up

Over time, successful public blockchain networks will have to incentivise Nodes, whilst creating favourable costs for users, with transactions completed in a relevant timeframe. This balance is key to the economics of each blockchain.



#### The size of the block

Each transaction or “block” added to the chain increases the size of the database. As every node has to maintain a the chain to run, the computing requirements increase with each use. For large public implementations of Blockchain this has one of two affects:

* **Smaller ledger**— Not every Node can carry a full copy of the Blockchain, potentially affecting immutability, consensus etc.
* **More centralised** — There is a high barrier to entry to become a Node, encouraging a larger amount of centralisation in the Network, with bigger players able to take more control.

Neither of these scenarios is desirable, without considering the full implications, as it will likely affect the use cases for blockchain variants.



#### Speculative markets

Many blockchains are run using token/currency models to fund development or manage the economics of Nodes. For example, Ether (ETH) is the currency used to pay for computing power (or Gas) on the Ethereum network. Therefore ETH is a currency for computing power.

Traditional currencies like USD, GBP, EUR (also called Fiat currencies) are generally linked to value of their respective economies e.g. GBP to the UK. These economies are well developed, regulated and stable. ETH is not. However, due to the potentially disruptive nature of Blockchains, people have taken to speculating on the value of the digital economies they create.

As these markets are subject to limited regulations, and are highly speculative they are prone to rapid fluctuation and manipulation, spiking transaction value. This presents particular risks when transacting from Fiat currencies into blockchain currencies. For example 1 ETH may cost ~$200 today, but ~$180 tomorrow, a 10% price fluctuation. Whilst this can create large rewards, it also presents high degrees of uncertainty for projects developed on public blockchain technology.



#### Hard and Soft Forks

Many blockchains and currencies decentralise their decision making. For example Bitcoin allows Nodes to “Signal” support for improvements to the core Software that run the network. This allows the blockchain to avoid centralised decision making, but also presents challenges when communities are divided about the best course.

When Nodes change their Software, there is potential for a “Fork” in the Chain. Nodes operating the new Software will not accept the same transactions as Nodes operating the old one. This creates a new blockchain, with the same history as the one it is built on.

Forks create significant uncertainty, as they have the potential to fragment the power of the blockchain network into lots of variants. They are also likely to be necessary, as without the capacity to update the Software, the blockchain is unlikely to be future proof.



#### Immutable Smart contracts

Once the smart contact is added to the blockchain, it becomes immutable, in that it cannot be changed. If there are flaws in the code that may be exploited by hackers, they are there forever. This is not a concern when a smart contract is not being used, but as smart contacts behave like accounts, they can be used to store large amounts of value.

This can create scenarios where hackers can exploit code flaws to send the contents of smart contracts to their own accounts. As the blockchain is immutable, these Transactions are very hard to undo, meaning large amounts of value may be lost forever.

**CURRENT**

Right now, the the blockchain is still in the early stage of its development. There already exists a basis for creation of unique ecosystems that can significantly improve productivity as well as the avaibality of many goods and services. And cryptocurrency is just one of many ways in which blockchain can be used.

**Top 10 Trends for Blockchain Technology in 2018 and Beyond**

1. **Higher Prices for Bitcoin and Other Top Alts:** Near the end of 2018 the entire cryptocurrency space may very well pass $1 Trillion dollars in total market capitalization. A more bearish scenario would require the market a couple years to consolidate, recover, and regain upward momentum. Watching Bitcoin drop back down to $5,000 - $6,000 before going back up to achieve new all time highs.
2. **Delisting of Many "Useless" Tokens on Exchanges:** Exchanges have three likely options: A) delist "useless" non-utility tokens that do not carry out the function they claim, B) register with the SEC, or C) close their doors. This goes hand-in-hand with the SEC's impending regulations, which I predict will come out this year. Exchanges are critical for providing liquidity in the markets. In an attempt to comply with these new regulations, exchanges will delist an increasing number of tokens, which lack a clear product or use-case. One such example is Metal's delisting from Bittrex. I expect this trend to continue with greater speed in the coming years. US exchanges that carry tokens that are deemed unregistered securities will find themselves in the SEC's crosshairs. Registered investors should use a platform or entity registered with the SEC, such as a national securities exchange, alternative trading system (ATS), or broker-dealer. Companies that sold tokens that are deemed securities will likely be fined or worse.
3. **Higher Quality Entrepreneurs and Developers Go To Blockchain:** Many are simply not convinced that blockchain technology has real uses but the tide is turning. Higher token prices mean more blockchain startups will make more highly competitive offers to developers vying for talent with the likes of Amazon, Google, Apple, and Facebook. Working on tokens and protocols will reshape the startup landscape in Silicon Valley and the rest of the world.
4. **The Shift Away from Ethereum to Other Platforms:** More companies will realize the impractically expensive fees of Ethereum based protocols and consider alternatives. While building and deploying smart contracts on Ethereum's Turing Complete platform gives a lot of room for expressivity, it comes at very high costs. Literally. Network congestion can make transferring data or executing smart contracts on Ethereum extremely expensive. Oftentimes the price of transfering data on Ethereum spikes well over $1.00 and growing network congestion makes this worse. If you were charged $1.00 or more every time you liked a comment on Facebook or shared a story on Snapchat, how long would you continuing using it? Scalability problems on Ethereum will push developers to consider other building on other platforms like Stellar, NEO, and other DApp platforms.
5. **Central Banks Embrace Blockchain Technology:** More government experimentation with blockchain will continue even in the presence of regulatory scrutiny. Central banks keen on reducing friction and lowering costs from antiquated processes will experiment with blockchain-based settlements. I anticipate blockchain integrations with central banks are on the horizon and will be a key development in 2018. As a result, foreign exchange markets and cross-border remittances will become more efficient and cheaper for people to use. These are the first steps towards a global cashless society.
6. **China's Crypto-Prohibition Intensifies:** When enough of the population wants something, it's going to get what it wants. China is now implementing further restrictions on VPN providers to prevent capital outflows into ICOs, among other activities. The last thing they did was shutdown exchanges in the fall of last year. Ironically, these efforts only strengthen decentralization by encouraging P2P networks while diminishing centralized platforms like major exchanges.
7. **The Rise of Decentralized Exchanges:** Longer term, these efforts will also embolden the emergence of distributed technologies and decentralized exchanges like the [Stellar Distributed Exchange](https://stellarterm.com/) and 0x Protocol.
8. **Declining ICO Success Rates:** There will be many more ICOs that fail to hit hard caps or key product milestones. The few major ICOs that do occur will likely take the shape of long awaited reverse-ICOs (like Telegram, [Overstock.com](https://overstock.com/), Kodak, etc.) and attract the majority of capital in the pre-sale. Even though ICOs may hit their hard caps this will be done with higher prices for Bitcoin and Ethereum in 2018, so the total token raise will be much less when compared to past ICOs. A growing number of projects will also fail to deliver any tangible product that attains product market fit. The declining success rates will accelerate further because the SEC's nebulous stance on ICOs finally comes to an end. Expect the SEC to introduce concrete guidelines and regulations for the space in 2018. In an effort to protect the influx of Main Street investors from fraud and market manipulation, most ICOs will be subject to the SEC's guidelines because they have no product. The existential risk of freezing or shutting down exchanges exist. With this trend we will also see mainstream investor enthusiasm die down significantly.
9. **Taxes and Anti-Money Laundering Laws Will Be a Bigger Issue than Security Laws:** The biggest elephant in the room is not the SEC; it's the IRS and FinCEN. Accumulated tax liabilities will apply to ICOs past, present, and future and all US entities in the space. A few years ago the IRS deemed some cryptocurrencies to be property, which means every time crypto is used for sale or exchange it's potentially a taxable event. The IRS has launched a John-Doe summons of Coinbase so now every transaction of $20,000 or more has to be reported. Beyond that, [FinCEN recently said that companies selling tokens are money transmitters and must comply with relevant KYC/AML laws](https://coincenter.org/link/fincen-raises-major-licensing-problem-for-icos-in-new-letter-to-congress" \t "_blank). Note, [FinCEN fined Ripple years ago for operating an unlicensed money services business](https://www.fincen.gov/news/news-releases/fincen-fines-ripple-labs-inc-first-civil-enforcement-action-against-virtual" \t "_blank).
10. **Intense Promoter Scrutiny:** This is less a prediction and more of a call to action. There are emerging self-proclaimed "Youtube experts" in the crypto space evangelizing high expectations of ROI for projects that they have [undisclosed special private deals](https://www.ft.com/content/353524c2-a967-11e7-ab55-27219df83c97). This creates an environment where influencers can potentially harm Main Street investors with unqualified investment advice and/or manipulate markets with "pump and dump" schemes. Expect the Federal Trade Commission and other consumer protection agencies to take action against such promoters.

What are Blockchain's Issues and Limitations?

**Complexity**

Blockchain technology involves an entirely new vocabulary.

It has made cryptography more mainstream, but the highly specialized industry is chock-full of jargon. Thankfully, there are several efforts at providing glossaries and indexes that are thorough and easy to understand.

**Network size**

Blockchains (like all distributed systems) are not so much resistant to bad actors as they are 'antifragile' – that is, they respond to attacks and grow stronger.

This requires a large network of users, however. If a blockchain is not a robust network with a widely distributed grid of nodes, it becomes more difficult to reap the full benefit.

There is some discussion and debate about whether this a fatal flaw for some permissioned blockchain projects.

**Transaction costs, network speed**

Bitcoin currently has notable transaction costs after being touted as 'near free' for the first few years of its existence.

As of late 2016, it can only process about seven transactions per second, and each transaction costs about $0.20 and can only store 80 bytes of data.

There's also the politically charged aspect of using the bitcoin blockchain, not for transactions, but as a store of information. This is the question of ''bloating' and is often frowned upon because it forces miners to perpetually reprocess and rerecord the information.

**Human error**

If a blockchain is used as a database, the information going into the database needs to be of high quality. The data stored on a blockchain is not inherently trustworthy, so events need to be recorded accurately in the first place.

The phrase 'garbage in, garbage out' holds true in a blockchain system of record, just as with a centralized database.

**Unavoidable security flaw**

There is one notable security flaw in bitcoin and other blockchains: if more than half of the computers working as nodes to service the network tell a lie, the lie will become the truth. This is called a '51% attack' and was highlighted by Satoshi Nakamoto when he launched bitcoin.

For this reason, bitcoin mining pools are monitored closely by the community, ensuring no one unknowingly gains such network influence.

**Politics**

Because blockchain protocols offer an opportunity to digitize governance models, and because miners are essentially forming another type of incentivized governance model, there have been ample opportunities for public disagreements between different community sectors.

**How Can I Buy Bitcoin?**

**1 – set up a wallet**

The first step is to set up a wallet to [store your bitcoin](https://www.coindesk.com/information/how-to-store-your-bitcoins/) – you will need one, whatever your preferred method of purchase. This could be an online wallet (either part of an exchange platform, or via an independent provider), a desktop wallet, a mobile wallet or an offline one (such as a hardware device or a [paper wallet](https://www.coindesk.com/information/paper-wallet-tutorial/)).

Even within these categories of wallets there is a wide variety of services to choose from, so do some research before deciding on which version best suits your needs.

You can find more information on some of the wallets out there, as well as tips on how to use them, [here](https://www.buybitcoinworldwide.com/wallets/) and [here](https://bitcoin.org/en/choose-your-wallet).

The most important part of any wallet is keeping your keys (a string of characters) and/or passwords safe. If you lose them, you lose access to the bitcoin stored there.

**BUYING ONLINE**

**2 – open an account at an exchange**

Cryptocurrency exchanges will buy and sell bitcoin on your behalf. There are [hundreds](https://bitcoincharts.com/markets/list/) currently operating, with varying degrees of liquidity and security, and [new ones](https://www.coindesk.com/huobi-sbi-announce-plan-japanese-bitcoin-exchanges/) continue to emerge while others end up [closing down](https://www.coindesk.com/south-korean-bitcoin-exchange-declare-bankruptcy-hack/). As with wallets, it is advisable to do some research before choosing – you may be lucky enough to have several reputable exchanges to choose from, or your access may be limited to one or two, depending on your geographical area.

The [largest bitcoin exchange](https://www.cryptocompare.com/coins/btc/analysis/USD) in the world at the moment in terms of US$ volume is [Bitfinex](https://www.bitfinex.com/" \t "_blank), although it is mainly aimed at spot traders. Other high-volume exchanges are [Coinbase](https://www.coinbase.com/" \t "_blank), [Bitstamp](https://www.bitstamp.net/" \t "_blank) and [Poloniex](https://poloniex.com/" \t "_blank), but for small amounts, most reputable exchanges should work well. (Note: at time of writing, the surge of interest in bitcoin trading is placing strain on most retail buy and sell operations, so a degree of patience and caution is recommended.)

With the clampdown on know-your-client (KYC) and anti-money-laundering (AML) regulation, many exchanges now require verified identification for account setup. This will usually include a photo of your official ID, and sometimes also a proof of address.

Most exchanges accept payment via bank transfer or credit card, and some are willing to work with Paypal transfers. And most exchanges [charge fees](https://www.coindesk.com/chinas-big-three-bitcoin-exchanges-end-no-fee-policy/) (which generally include the fees for using the bitcoin network).

Each exchange has a different procedure for both setup and transaction, and should give you sufficient detail to be able to execute the purchase. If not, consider changing the service provider.

Once the exchange has received payment, it will purchase the corresponding amount of bitcoin on your behalf, and deposit them in an automatically generated wallet on the exchange. This can take minutes, or sometimes hours due to network bottlenecks. If you wish (recommended), you can then move the funds to your [off-exchange wallet](https://www.coindesk.com/information/how-to-store-your-bitcoins/).

**BUYING WITH CASH**

**2 – choose a purchase method**

Platforms such as [LocalBitcoins](https://localbitcoins.com/" \t "_blank) will help you to find individuals near you who are willing to exchange bitcoin for cash. Also, [LibertyX](https://libertyx.com/" \t "_blank) lists retail outlets across the United States at which you can exchange cash for bitcoin. And [WallofCoins](https://wallofcoins.com/" \t "_blank), [Paxful](https://paxful.com/" \t "_blank) and [BitQuick](https://www.bitquick.co/" \t "_blank) will direct you to a bank branch near you that will allow you to make a cash deposit and receive bitcoin a few hours later.

ATMs are machines that will send bitcoin to your wallet in exchange for cash. They operate in a similar way to bank ATMs – you feed in the bills, hold your wallet's QR code up to a screen, and the corresponding amount of bitcoin are beamed to your account. [Coinatmradar](https://coinatmradar.com/" \t "_blank) can help you to find a bitcoin ATM near you.

**Legal and not legal countries in bitcoin.**

**Countries that Say Yes to Bitcoin**

The fact that bitcoin can be anonymously used to conduct transactions between any account holders, anywhere and anytime across the globe, makes it attractive to criminal elements. They may use bitcoins to buy or sell illegal goods like drugs or weapons. Most countries have not clearly made determinations on the legality of bitcoin, preferring instead to take a wait-and-see approach. Some countries have indirectly assented to the legal usage of bitcoins by enacting some regulatory oversight. However, bitcoin is never legally acceptable as a substitute for a country’s legal tender.

**The United States**

The U.S. Department of Treasury’s Financial Crimes Enforcement Network (FinCEN) has been issuing guidance on bitcoin since the beginning of 2013. The Treasury has defined bitcoin not as currency, but as a money services business (MSB). This places it under the Bank Secrecy Act which requires exchanges and payment processors to adhere to certain responsibilities like reporting, registration, and record keeping. In addition, bitcoin is categorized as property for taxation purposes by the Internal Revenue Service (IRS). (Related Bitcoin: Current And Future Legal Framework)

**Canada**

Like its southern neighbor the United States, Canada maintains a generally bitcoin-friendly stance while also ensuring the cryptocurrency is not used for money laundering. Bitcoin is viewed as a commodity by the Canada Revenue Agency (CRA). This means that bitcoin transactions are viewed as barter transactions, and the income generated is considered as business income. The taxation also depends whether the individual has a buying-selling business or is only concerned with investing.

Canada considers bitcoin exchanges to be money service businesses. This brings them under the purview of the anti-money laundering (AML) laws. Bitcoin exchanges need to register with Financial Transactions and Reports Analysis Centre (FINTRAC), report any suspicious transactions, abide by the compliance plans, and even keep certain records. In addition, the Canadian government has tasked the Senate Banking Committee with drafting guidelines for the legislature of virtual currencies by July of 2015.

**Australia**

Australia allows entities to trade, mine, or buy bitcoin. The Australian Taxation Office (ATO) considers bitcoin transactions barter arrangement subject to appropriate taxes depending upon the use and user (full document).

**The European Union**

Though the European Union (EU) has followed developments in cryptocurrency, it has not issued any official decision on legality, acceptance, or regulation. In the absence of central guidance, individual EU countries have developed their own bitcoin stances. A few nations are allowing bitcoin while others are either undecided or issuing warnings.

In Finland, the Central Board of Taxes (CBT) has given bitcoin a value-added tax exempt status by classifying it as a financial service. Bitcoin is treated as a commodity in Finland and not as a currency. The Federal Public Service Finance of Belgium has also made bitcoin exempt from value added tax (VAT). In Cyprus, bitcoins are not controlled or regulated but are not illegal either. The Financial Conduct Authority (FCA) in the United Kingdom (UK) has a pro-bitcoin stance and wants the regulatory environment to be supportive of the digital currency. Bitcoin is under certain tax regulations in UK. The National Revenue Agency (NRA) of Bulgaria has also brought bitcoin under its existing taw laws. Germany is open to bitcoin; it is considered legal but taxed differently depending upon whether the authorities are dealing with exchanges, miners, enterprises, or users.

**Countries That Say No to Bitcoin**

While bitcoin is fairly welcomed in many parts of the world, there are few countries which are wary of bitcoin because of its volatility, decentralized nature, perceived threat to the current monetary system, and link to illicit activities like drug dealing and money laundering. Some of these nations have outright banned the digital currency while others have tried to cut off any support from the banking and financial system essential for its trading and usage.

**Iceland**

The island nation has been exercising stringent capital controls as a part of its monetary policies adopted after the global economic crisis of 2008. It seeks to protect the outflow of Icelandic currency from the country. Under the same pretext, foreign exchange trading with bitcoin is banned in Iceland as the cryptocurrency is not compatible with the country’s Foreign Exchange Act. Interestingly, a new cryptocurrency called Auroracoin has lauched out of Iceland. Its founders wished to create a viable alternative to the present Icelandic banking system.

**Vietnam**

From the beginning, Vietnam’s government and its state bank have maintained that bitcoin is a not a legitimate payment method. After a few initial rounds of public rejoinders against the use of bitcoin, Vietnam made it illegal for both financial institutions and citizens to deal in bitcoin. It links the cryptocurrency to criminal activities such as money laundering.

**Bolivia**

El Banco Central de Bolivia has banned the use of bitcoin and other cryptocurrencies.

**Kyrgyzstan**

Using bitcoin and altcoin as a payment form is illegal in Kyrgyzstan.

**Ecuador**

Bitcoin and other cryptocurrencies were banned in Ecuador by a majority vote in the national assembly. However, the nation has plans to create its own cryptocurrency in the future.

**Russia**

The legality of bitcoin in Russia is disputed. Russia’s Ministry of Finance is hoping to pass a law to ban bitcoin sometime this year.

**China**

All banks and other financial institutions like payment processors are prohibited from transacting or dealing in bitcoin. Individuals, however, are free to deal in bitcoin between themselves. Bitcoin culture is thriving in China. It continues to be one of the worlds larges bitcoin markets. (Related reading How Bitcoin Can Change The World)