

BITCOIN FOR BEGINNERS –  
EXPLAINING BITCOIN SO  
YOU'RE GRANDMA COULD  
UNDERSTAND IT.

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Bitcoin has been around since 2009 and it's fair to say that until literally a few months ago, I had zero interest in learning about it. To me Bitcoin was for drug dealers, arms dealers, ransoms and ransomware over the Internet. The domain of those that want to remain anonymous. I had no clue what Bitcoin was, how you paid someone, how you got paid and was it for normal people like you and me.

I'm middle aged and very old school. But we live in a fast moving world. Tech is here to stay. So, I have been looking into Bitcoin. For the last few months, I have been reading, watching, trying getting it wrong, trying again and gaining experience on how to use Bitcoin. It's fair to say that I have become a Bitcoin enthusiast.

### **The Aim of this Guide**

The aim of this guide is to give you a basic understanding of What Bitcoin is, where Bitcoins come from, how to store Bitcoins and how to buy Bitcoins. By reading this guide you will not become a Bitcoin trader but will certainly understand the basics of Bitcoin. You can then make an informed decision if it's something you want to be involved with or not.

I will do my very best to break down all the techie, geeky language and make it so that your grandma can understand what's going on. **Let your Bitcoin journey begin.**

### **What is Bitcoin?**

Before we talk about Bitcoin you first need to understand that we now live in an age of digital money. Yes, you can get cash out but most transactions are conducted digitally. Imagine you go and buy a coffee, you pay with a debit card, PayPal, Apple Pay, and so on. You don't think that someone from those organisations physically gets up and takes the cash to that coffee bar. They don't. It's all done digitally. Millions of digital financial transactions occur every day without any physical cash changing hands. Digitisation makes money much easier to count, manage and move.

The banks need to keep a close tab on things. What's to stop them from duplicating files and just creating more money? This is called the double spend problem and is solved by the banks having ledgers. The banks have ledgers on their computers which keep a track on who owns what. Everyone has an account and this ledger keeps a tally for each account. We all trust the bank and the bank trusts their computers. Although maybe a lot of that trust has gone.

## **What about if you don't want to use a bank?**

In 2008, a researcher published a paper on what he called a **de-centralised solution**. His idea was Bitcoin. He explained how to make a ledger that does not rely on a single particular bank. A good example of a de-centralised solution is the Internet. No one owns the internet. There is no Internet PLC. We all use it and many businesses have spent billions on providing the infrastructure of the Internet. The Internet has de-centralised information technology, Bitcoin de-centralises money and takes away the need for banks. You effectively become your own bank. Some will find that cool.. Others will find that scary.

**Bitcoin is a form of digital currency, created and held electronically. No one controls it. No single institution controls the bitcoin network.** This puts some people at ease, because it means that a large bank can't control their money. **Bitcoins aren't printed, like dollars or euros.** In Bitcoin the coins or the transactions are recorded in a ledger. **What makes Bitcoin very different is that this ledger is public, shared & maintained by the public. Every transaction is on that ledger.**

Thousands of people have a copy of that ledger and anyone can download it and verify it. You don't have an account, money is moved between Bitcoin addresses which are like an email addresses. **Every transaction is publicly available to see.** You can't see any names, but you can see which Bitcoin address sent another Bitcoin address money. **In Bitcoin the ledger is called the Blockchain.** You can't hack or change the ledger or Blockchain as there are thousands of copies all over the world.

Bitcoin can be used to buy real things. It's a real currency. It's like Dollars or Euros. Bitcoin is created digitally by a community of people that anyone can join. **I will go into more detail on how we get Bitcoins in another article.** There are now exchanges where you can buy and sell Bitcoin and services to allow you to accept payments in Bitcoin. **There are some significant benefits to small businesses of using Bitcoin.**

Bitcoin allows payment in a currency that is unaffected by the global foreign exchange fluctuations, meaning that customers from all over the world all pay the same for a product. Bitcoin is not limited by borders or barriers to financial movement. For those parts of the world where banking is less than reliable, this opens up a whole new set of customers.

## **How are Bitcoins created?**

With Traditional money, Governments print money. **With Bitcoin no one prints money.** Instead Bitcoins are the rewards for collecting, verifying and adding all these transactions made during a set period to the ledger or Blockchain. People are sending money to each other. All these transactions need to be verified and added to a ledger or blockchain or no one would be able to keep track of who paid what. **This process is called 'Mining'**. The miners verify and add Bitcoin transaction to a ledger or blockchain. **Their reward for doing this is Bitcoins.**

## **How can we trust this ledger or Blockchain?**

This is where the miners come in. When transactions are added to the Blockchain it's their job to apply a process to each transaction. They take the information in the Block and apply a mathematical formula to it. Miners are therefore carrying out very complex mathematical processes which make sure that the Blockchain stays intact and can never be tampered with. Miners are therefore competing with each other using specifically written software. Once the blockchain has been approved, the miner gets their reward. That's their incentive to keep mining and to keep the transactions working. New blocks are added to the blockchain roughly every 10 minutes.

## **Let's recap – but still keeping it very simple.**

Bitcoin is created by Mining. Mining is done by machines that add & verify Bitcoin transactions to the ledger or Blockchain. To do this they must solve very complex mathematical problems. Mining is therefore done by machines. These problems get harder as the Blockchain gets longer. In May 2017 there were a maximum of 72 Bitcoins mined per hour. This will halve according to the Bitcoin protocol to a maximum of 36 Bitcoins mined per hour in June 2020. There is a finite number of Bitcoins that can be mined for. That is 21 Million. The final coin will be mined for in 2140 well after my lifetime.

## **Bitcoin Wallets**

Now that you understand what a Bitcoin is and where they come from, you are ready for the next step. Getting some Bitcoins. But, before you go ahead and buy any Bitcoins, you will need somewhere to store them. This is where you need to have a slightly different mind-set. **You need to imagine you are your own bank. You need to safeguard your Bitcoins from theft and you must take that very seriously.**

Bitcoin wallets store the private keys that you need to access a bitcoin address and spend your funds. They come in different forms, designed for different types of device. A Bitcoin wallet is simply some software to

send and receive Bitcoin, check your balance & store your Bitcoins. Wallets interface with the ledger or Blockchain. Wallets monitor Bitcoin addresses on the Blockchain and update their balance with each transaction. The key thing to remember about a wallet is where does it store its private key. The private key is just a very long string of numbers and letters that acts as the password to your Bitcoin wallet. It's from this number that your wallet gets its ability to send your Bitcoins to other people. The private key is also used to generate your Bitcoin address, that's what you give out to people so they can send you Bitcoin.

Wallets have improved over the years. HD Wallets have been created. These Wallets generate an initial phrase or seed. This seed is a string of common words that can be kept safe and secure instead of you having to learn a very long random string of numbers and letters. The benefit is that if your Wallet gets lost or stolen you can enter these words to reconstruct your private key. Also for more security, HD wallets can create many Bitcoin addresses from the same seed. All of the transactions sent to addresses created by the same seed will be part of the same wallet.

**I cannot stress this enough. YOU must keep your private keys safe and secure.** Whoever has access to these things has access to your Bitcoins. If you lose these keys your Bitcoins could well be lost forever. Remember, there is no bank, you're the bank. **You are in total control over things. It's your responsibility to keep your seed or private key safe and secure.**

### **Where should I store my Bitcoins then?**

The answer to this is that there is no one solution. You need to think about how you will go about using them, how many Bitcoins will you have, how often do you need to access the Wallet, do I want to carry the wallet on me, do I need to share the wallet with other people and how much of a techie are you. **There are 4 main types of Wallet. Desktop, Mobile, Online and Hardware.**

The safest option is what is called – **Cold wallets or hardware.** These are devices that store your private keys and are not connected to the internet. **They are by far the most secure.** But they cost money and not practical to use them out shopping. After spending hours and hours reading up on which wallet to get, **I decided on two.** You can have as many wallets as you like. You should always do research before downloading or installing any Bitcoin wallet. Many wallets are malware and will just steal your bitcoins once you fund the wallet.

## What Wallets did I get?

I decided to get a Mobile Wallet. I know there are many. I looked at most of them. I wanted to get one that was very newbie friendly, not that technical to install, appeared on many different sites as a top iOS Bitcoin Wallet and had good write ups. **In the end I went with Bread.** Bread is one of the most popular Bitcoin Wallets for iOS devices. It is incredibly secure, free and it took me literally a few minutes if that to get set up. Its basic but that is all I wanted. Currently all you can do is send and receive Bitcoin. **Exactly what I wanted.**

I also decided to get a cold storage Wallet. Again, after tons of research and reading, **I went for the Ledger Nano S** Again, I wanted something simple, not too expensive, had excellent write ups on many different sites, was incredibly secure and above all was easy to use and set up.

## Buying Bitcoins

Buying Bitcoins is really really easy. I have personally used the [Coinbase exchange](#) to buy £20 worth of Bitcoins. It worked brilliantly. It was simple to use, simple to set up, and delivered exactly what I thought I was getting in a timely fashion. **Remember to stay safe out there.** Coinbase might not be the cheapest out there but if you are buying small quantities then it's great for ease of use and getting started. Once you become more confident, there are many ways of buying Bitcoins.

There are many exchanges popping up all over the place perhaps offering all sorts of extras to get you to buy through them. They're not after delivering you any Bitcoins, instead they simply want your ID and credit / debit card information.

Each bitcoin is divisible to the 8th decimal place, meaning each bitcoin can be split into 100,000,000 pieces. Each unit of bitcoin, or 0.00000001 bitcoin, is called a satoshi. Most exchanges let you buy as little as \$5 worth of bitcoins at a time. Remember also that after buying Your Bitcoin I would recommend that you transfer it to your own secure Bitcoin Wallet. There are fees attached to buying Bitcoins like buying any other currency. **Make sure you do your research first.**

**Coinbase** is the world's largest Bitcoin Brokers. It's probably the most recommended Bitcoin exchange out there. Every article, review, blog post ranks them one of the very best if not the best. Part of that reason is that it's very simple to use. It's perfect if you are new to buying Bitcoin. I used them to purchase my very first £20 worth of Bitcoin. I bought my Bitcoin with my debit card. The whole process took a few minutes from verifying my ID to actually getting the Bitcoins. [Check out Coinbase.](#)

## **The Bitcoin Minefield**

Be really really careful regarding fees. There are literally fees everywhere when it comes to buying Bitcoins, selling Bitcoins, transferring Bitcoins from one wallet to another, transferring fiat currency into your Bitcoin exchange, paying with debit and credit cards. It's a total minefield. You can and will waste huge amounts of money if you don't know what you're doing or just rush into things.

## **Accepting and Paying with Bitcoin**

Once you have got your Bitcoin digital Wallet then accepting Bitcoin and paying with Bitcoin is relatively easy. To accept Bitcoin you simply need to give out your Bitcoin Address. This can be either a QR code or what seems like a random set of letter and numbers. For example here is mine: **1PPNnpVjCEfzxYpm3zE4XQLGKQtT9XqcQ6** anyone can now send me some Bitcoin and it goes directly into my Wallet.

To send payments you simply need to scan or copy / paste their Bitcoin address into your Wallet & hit send. Be warned, once it's gone, it's gone. There's no banking ombudsman if it gets lost or sent to the wrong person or sent to a scam.

However, there is an issue. That issue is that I won't know who has sent me any Bitcoin. Remember, there's no names, addresses associated with Bitcoin addresses. If you are selling products or services then you need to know who sent you the Bitcoin so that you can deliver them the goods. To solve this issue there are various Bitcoin processors that will allow you to take Bitcoin, but at the same time you can configure extra boxes of information that you require. I added an email address and a full name box.

I have personally used [Bitpay](#). With them I can now create website buttons, text links and integrate their payment processor with Shopify, woo commerce and a range of other plug-ins for my website. What's cool is that they only charge 1% transaction fee and send you the currency of choice after exchanging Bitcoin to your bank each day. They also have an App for retailers. [Here is the Bitcoin for retail business info.](#)

## Worth Knowing.

The seller pays the transaction fees. Currently these can be quite high. They can range from say \$1 - \$5 which can make paying for a cup of coffee not worth it as the transaction fee is more than the coffee. You pay for each transaction but the value of the transaction does not matter. You would pay the same amount to make a single transfer of £10 as to make a single transfer of £10,000.

Transactions typically take around 30mins. But can take much longer depending on how congested the network has become. You can also elect on some different Bitcoin Wallets to pay a higher priority fee or just a standard fee. This will massively impact the time it takes to confirm the transaction. Exchanges seem to transfer with a high priority fee. I got my transfer completed in approx. 10 Mins but it cost £3-4. This can be a problem if you're selling goods that you want a very quick response. It can also make transferring small amounts from an exchange very costly.

You can check on any transactions. The ledger is public. To do so you simply need to go to <http://blockchain.info/address/YourAddress>

Your address is your Bitcoin Wallet address. The address you give out to others to pay you.

## Your Next Steps

I hope this guide has wetted your appetite for buying Bitcoins. Your next step is to actually buy some Bitcoins.

## Here are Your 6 Steps for Buying Bitcoins for the 1<sup>st</sup> time.

Buying Bitcoins feels very daunting and scary all at the same time. Let me hold your hand and walk you through your first steps to buying to first Bitcoins. This is exactly what I and many others have done to get started. Once you have done your first purchase, then you can learn more about reducing your fees and trading.

1. Having read my guide, now get yourself a Bitcoin Wallet. For just starting out I went for the [Bread App Wallet](#) It works on both iOS And Android. Its super simple, very safe, highly reviewed & one of the most downloaded Bitcoin Wallets. **It does not come with all the fancy bells and whistles but it's all you need to get started.**
2. Now head over to [Coinbase](#) this is the premier Bitcoin buying exchange. It's super easy to use, get verified and buy your Bitcoins. It's not the cheapest but they make up for paying a bit more by making it very user friendly. For your 1st purchase it's exactly what you want. **I used them in my very first purchase.**

If you buy \$100 of Bitcoins with them BOTH you and I will get a \$10 bonus for doing so. This helps to keep the lights on over here at Mark Shaw HQ. [Click Here to Buy Your Bitcoins from Coinbase](#)

3. You do not need to buy all \$100 in one go. As long as you buy \$100 within 180 days of opening your account, you will get the bonus.
4. You have just bought some Bitcoin. It's in your BTC Wallet on Coinbase. Transfer it to your Bitcoin Wallet on your phone. Hit the receive button on the Bread App and then use that long Bitcoin Wallet address on the Coinbase site.
5. Your Bitcoin will arrive onto your Bread App within the next 30-60 mins depending on how congested the network is. Please note there are fees to transfer Bitcoins from Coinbase to your Bread App.
6. That's it. You are now the proud owner of some Bitcoin and more importantly you are in total control of it.
7. As I mentioned, this short guide is for people who simply want to buy some Bitcoin and have never done it before. **It's not the cheapest way.** But it's probably the easiest and simplest way. **It's exactly what I did to get my first \$100 of Bitcoin.**

**Remember, this is a beginner's guide.** There are loads more tips n tricks, advice and information I will share with you via my mailing list. You will get my very best advice and tips direct to your inbox. I want to help you save money and make you more money. Your Bitcoin journey starts today. Mark

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