Blockchain technology is commonly associated with Bitcoin and other cryptocurrencies, but that’s only the tip of the iceberg. Some people think blockchain could end up transforming a number of important industries, from health care to politics.  It’s effectively a database that’s validated by a wider community, rather than a central authority. It’s a collection of records that a crowd oversees and maintains, rather than relying on a single entity, like a bank or government, which most likely hosts data on a particular server. Of course, a physical database kept on paper could never be managed by tens of thousands of peers. That’s where computers, and the internet, come in. Each “block” represents a number of transactional records, and the “chain” component links them all together with a hash function. As records are created, they are confirmed by a distributed network of computers and paired up with the previous entry in the chain, thereby creating a chain of blocks, or a blockchain. The entire blockchain is retained on this large network of computers, meaning that no one person has control over its history. That’s an important component, because it certifies everything that has happened in the chain prior, and it means that no one person can go back and change things. It makes the blockchain a public ledger that cannot be easily tampered with, giving it a built-in layer of protection that isn’t possible with a standard, centralized database of information. While traditionally we have needed these central authorities to trust one another, and fulfil the needs of contracts, the blockchain makes it possible to have our peers guarantee that for us in an automated, secure fashion. That’s the innovation of blockchain, and it’s why you may hear it used to reference things other than Bitcoin and other cryptocurrency. Though generally not used for it yet, blockchain could be used to maintain a variety of information. An organization called “Follow My Vote” is attempting to use it for an electronic voting system that’s more secure than modern versions, and healthcare providers might one day use it to handle patient records. cryptocurrencies are a form of digital money which allow you to make purchases online. Unlike regular currencies, they only live online and aren’t backed or controlled by banks and governments. Cryptocurrencies are decentralized and run by a network of computers instead of a single person or a company. The money you own is stored in a digital wallet you keep in the cloud or offline on a PC and can be sent to someone via a computer or a mobile device like a smartphone. Each transaction is recorded in what is called a blockchain that is publicly available to all currency holders. Cryptocurrencies are generated through mining. Mining is done by computers, which try to solve a complex math puzzle known as a hash. People all across the globe compete to be the first to solve the hash, with the winner getting a certain amount of the cryptocurrency that’s being mined. The process requires specialist hardware that works around the clock, so even if you own a PC with a fast GPU, mining likely won’t be worth your time. Mining isn’t the only way to get cryptocurrencies, though. The easiest way is to buy them using your local currency on online marketplaces, where you can also sell them to other users. Just like with stocks and gold, for example, the value of a cryptocurrency is determined by supply and demand and is fluctuating all the time. The most expensive one is Bitcoin, which costs around $5,200 at the time of writing. Its price has increased drastically over the years. Back when it was first introduced, you could get one for only a few cents.

While Cryptocurrency and its usage is at an all-time high, so are the misconceptions about it. Most people still seem to ask - Why use Bitcoin? Since such currencies use different algorithms and are traded in unconventional ways, it is important to lookout for some important characteristics before investing in Bitcoin or others of its ilk. This includes -

* **Daily Trading Volume and Overall Market Capitalization**

Market capitalization of a cryptocurrency is the total worth of all its forms which are currently in circulation. New forms of Cryptocurrency might not be widely available, and therefore might not have high market capitalization. Similar to this is the daily trading volume, and a cryptocurrency which has higher trading volume than the others is considered more successful.

* **Verification Channels**

Each cryptocurrency has its own verification method. One of the most common methods for verification is called "Proof of Work". Herein, to verify a transaction, a computer has to spend time and computing power to solve difficult mathematical problems. On the other hand, "Proof of Stake" method allows users with the largest share of the cryptocurrency to verify the transactions, which requires far less computing power.

* **Acceptance of Cryptocurrency**

Unless a cryptocurrency is not accepted by major retailers or other businesses that you deal with, it doesn't stand much use. That is why Bitcoin still remains the most popular form of digital currency, since its reach is widespread and is accepted by many businesses and retailers alike.

There are pros and cons for using cryptocurrencies. It allows people especially from the first world country would most likely start using cryptocurrency for its efficiency and speed to paying online which means that money can be sent in just 10 minutes rather than waiting for a few working days for money to process. However, even though cryptocurrency’s usage is increasing, the lack of information and understanding about cryptocurrency transactions makes it difficult for governments to regulate or tax, leading to a host of criminal activity and problems for investors. Fears of exchanges being hacked are also a real problem and issues with wallets cause a lot of uncertainty.