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# CERTIFIED CRYPTOCURRENCY TRADER<sup>TM</sup>



**TOSHENDRA KUMAR SHARMA**

# Certified Cryptocurrency Trader™

First Edition

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He also founded Appvigil (Wegilant) in Nov 2011 while pursuing his Masters in Application Security from IIT Bombay, India. Appvigil is the Mobile App Vulnerability Scanner on Cloud. He was heading the team as CEO.

He was also the part of Forbes India 30 Under 30 List of 2016 and now is in Forbes Asia 30 under 30 List of 2018 in the enterprise technology space.

# Certified Cryptocurrency Trader™

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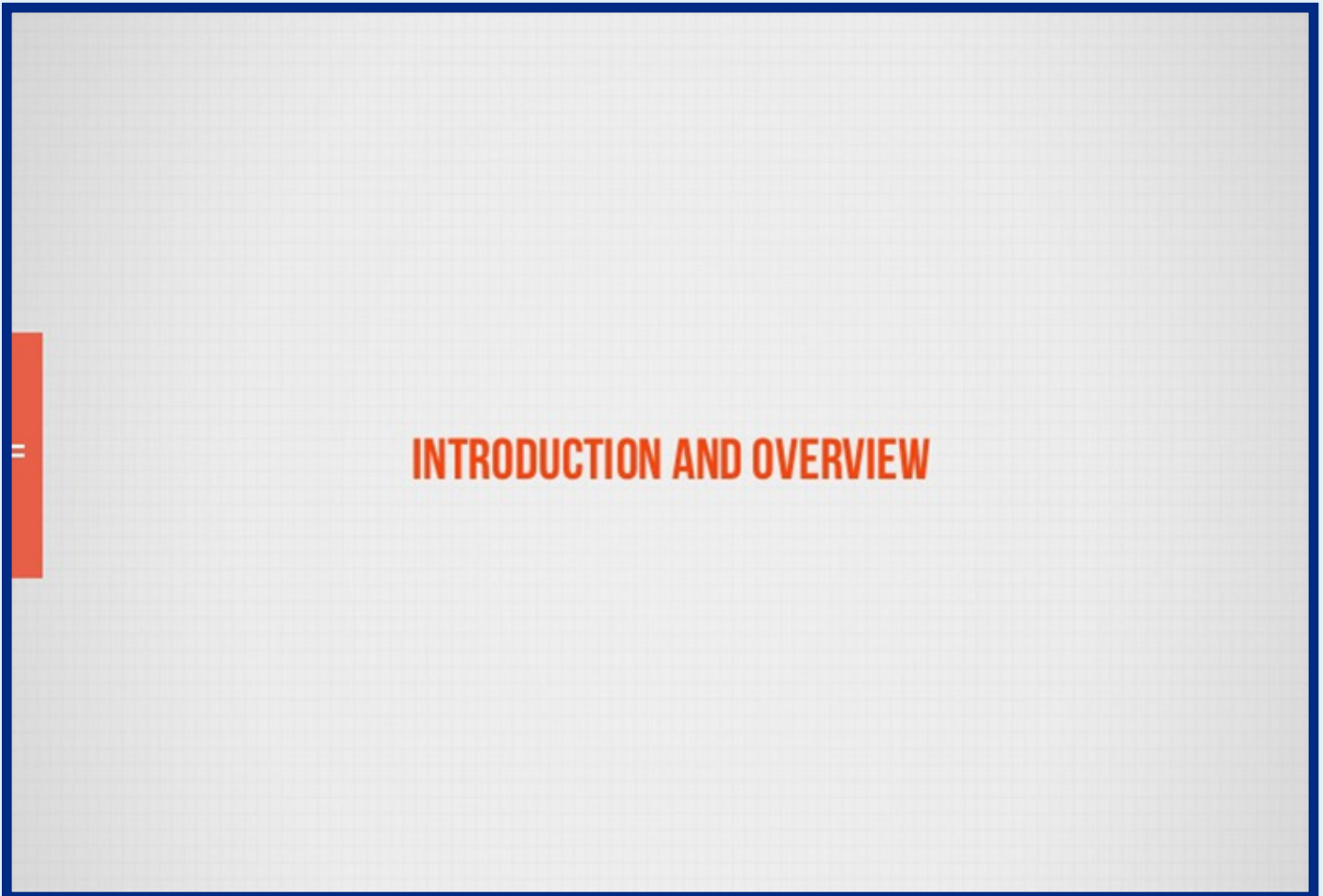
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# CHAPTER 1

## Introduction and Overview



In this book, we will be learning about Cryptocurrencies and their trading. Now a day, Cryptocurrencies receive news coverage on a daily basis, and investing in them can be fun, profitable, and rewarding.

Bitcoin and Ethereum have grown 940% and 3404% respectively over the last year as, interest investors' flock to the digital currency market and the digital wallet. So do you feel missed out on the crypto boom?

Absolutely not, this is just the beginning. Many other currencies are there in the market that has same potential, and they will make similar kind of a boom in the future.

Cryptocurrency trading is the Forex (Foreign Exchange) of Cryptocurrencies. This means you can trade different Bitcoin and Altcoin normally for USD and BTC. Cryptocurrency trading is an alternative way to get involved in the Crypto-World!

## WHAT YOU WILL LEARN?

- What is cryptocurrency?
- How it works?
- What defines its price?
- What are exchanges and wallets?
- What is Cryptocurrency trading and what are its types?
- Trading Psychology
- Trading tools and platforms
- Trading Patterns
- Trading Strategies
- How you can buy Cryptocurrencies?

We will also learn what a cryptocurrency is and how it works? What are the factors that define the price of Cryptocurrencies?

We will discuss the wallets and the exchanges that are the most crucial part of the Crypto trading ecosystem. We will look for some of the best exchanges and cryptocurrency wallets and see how they work.

Then, we will learn what crypto trading is and what the trading types are. After that we will learn about trading psychology and what should be the things that you need to consider while making trades over cryptocurrency markets.

We will also look for the trading tools and the platforms; to have an understanding what kind of tools one will require making profitable trades. There are lots of market analyses tools present in the market which are used by a lot of people. These promising tools are really helpful and save a lot of time and energy.


To extract critical information through market analysis, you have to understand what all charting tools and patterns are available in the market for the help.

Trading strategies will also be a part of our discussion; actually, a trading strategy outlines the specifications for making trades, including rules for trade entries, trade exits, and money management.

When properly researched and executed, a trading strategy can provide a mathematical expectation for the specified rules, which helps trades and

investors determine if a trading idea is potentially profitable. Investors should consider using a systemized trading strategy, but be aware of its many limitations. Trading strategies aren't a guarantee for success, but they may be effective in increasing risk-adjusted returns. So knowing some of the best strategies for the market would be a great help for your trading career.

Then, we will discuss how to buy or sell cryptocurrency by using proper market analysis, and also how to place buying and selling orders.



## WHAT YOU WILL LEARN?

- How to do chart analysis?
- How to read Candlesticks chart?
- Risk Management
- How to make your trading portfolio?
- Successful traits for trading
- How to predict the market?
- Do's and Don'ts of trading

Next is the chart patterns and the charting tools, we will learn how to chart out real-time market data and what can we make out from the patterns that are formed while charting market data.

Risk management strategies will also be discussed in this book, which will help you to minimize losses and maximize profits.

Building a portfolio, or diversifying your coins is a helpful strategy for trading, as it would reduce the risk of losing everything at once. So, we will discuss portfolio management and will tell you how to build cryptocurrency portfolio.

Then we will discuss the fundamental analysis, technical analysis and tell you the traits of being a successful trader. We will also look at the parameters that are required for predicting the markets.

And at last we will discuss trading rules, the do's and the don'ts of trading. All this will be discussed in a detailed manner with all the practical applications and examples, to make you a successful trader in the crypto community.



## **BENEFITS**

- Understanding of Cryptocurrencies
- Learn about the working of Cryptocurrencies
- Learn Cryptocurrency trading
- Learn how to place buying and selling orders
- Learn Trading tools and Platforms
- Learn Trading patterns and strategies

With such an informative book on crypto trading, there are a lot of benefits linked directly. It will provide you a complete understanding of Cryptocurrencies; it's working, use and trading of Cryptocurrencies.

You will be comfortable enough to use all the trading tools and platforms for placing profitable orders in the market. You will get familiar with the crypto trading ecosystem.

You will also learn the trading patterns and strategies that you will need for making transactions over Cryptocurrency trading platform.

Get ready to grasp the deeper understanding of Cryptocurrencies, how it works, learn trading skills, implement those skills for trading and be a part of the Crypto trading community.

It is like a proper job for many people, and mastering it will reap huge benefits to you, so never underestimate the power of trading.

## REQUIREMENTS

- Basic knowledge of Blockchain technology
- Awareness of Cryptocurrencies like Bitcoin, Ethereum etc.
- Must be motivated enough to learn about new and exciting Cryptocurrencies

So what are the requirements? Technically all the conditions are fundamental, all you need to have is the basic knowledge of computer science, like how the computer works, how networking works, etc. Do you need any advance knowledge?

If you are a non-computer science student, that's completely okay because you will be able to understand the technology, the concept and the skills. It is entirely okay even if you are in school and you want to understand this technology, this is the best time for you to jump in.

But in this, we require a fundamental understanding of Blockchain technology and how it works; also you need to have a little idea of what are Bitcoin and Ethereum. We will explain it in a more profound way through this book. And of course, you must be motivated enough to learn about the Cryptocurrencies in depth.

This book will benefit both, a beginner or a trader, because it has so much in store for everyone and even a professional trader, can improve trading skills to make much more profitable trades.

The only way to get better is to get in the game. There is no substitute for personal experience.

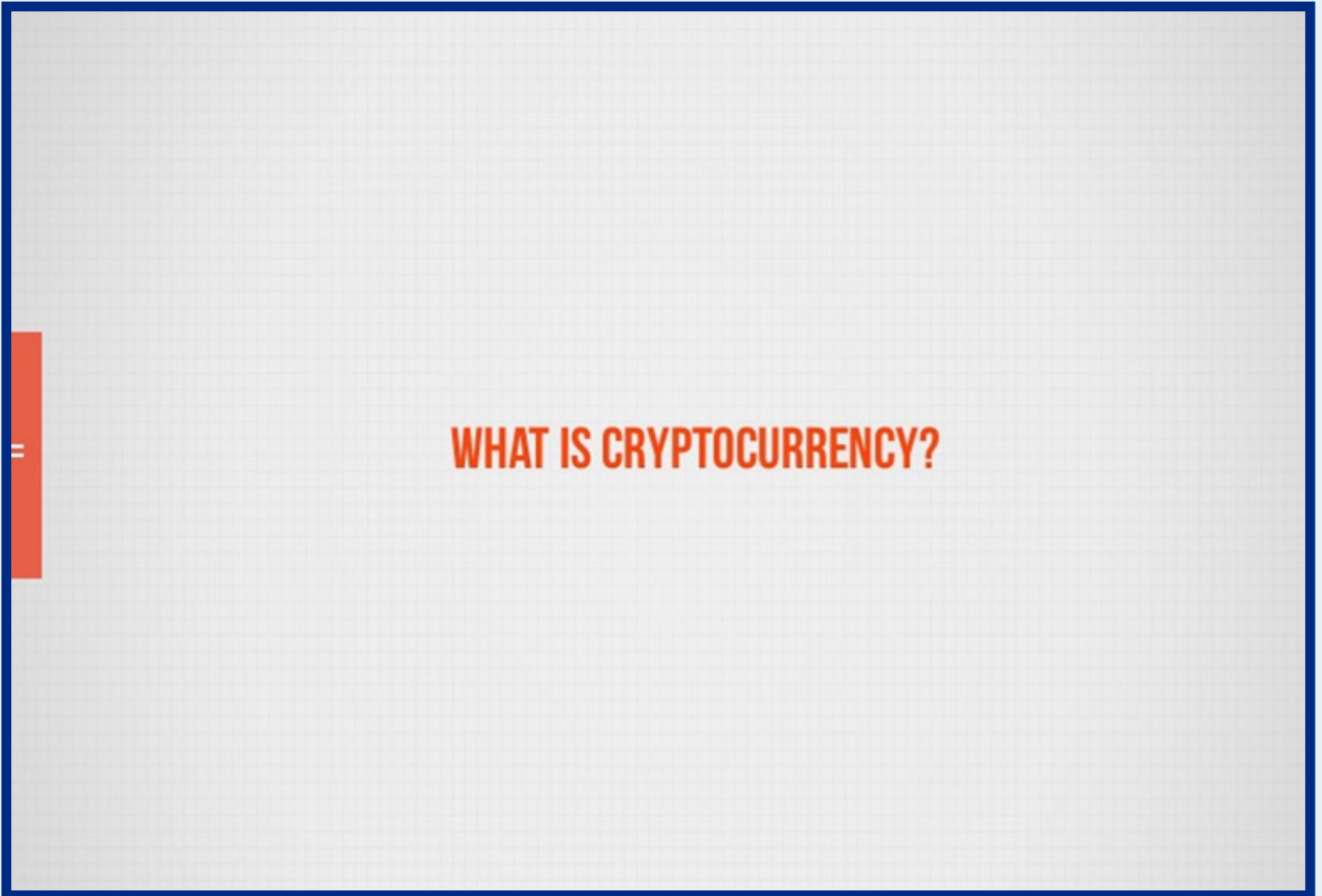
This is going to be a useful book that you are going to have to keep up with the technology and the market hype, and you are just one step away from gaining a complete understanding of Crypto trading which is a very promising and profitable business in the market nowadays.

With a bit of patience and diligence, investing in Cryptocurrencies can be an extremely lucrative experience.

So, fasten your seat belts and get ready to experience the real power of trading.

# CHAPTER 2

## What is Cryptocurrency?



Let's begin with, what is a Cryptocurrency?

## WHAT IS CRYPTOCURRENCY?



- A medium of exchange, created and stored electronically in the Blockchain
- An encrypted string of data or a hash, encoded to signify a unit of currency



Basically, it is a medium for exchange of immutable or intangible objects which are created and stored in the Blockchain. It is a digital form of currency that is stored electronically on the Blockchain platform.

The reason behind naming it as “Cryptocurrency” is the fact that it is an encrypted string of data or a hash, that’s encoded in a token, signifying a currency.

## BIRTH OF CRYPTOCURRENCY

- Satoshi Nakamoto, the anonymous person or a group of people, inventor of Bitcoin, the first and the most important cryptocurrency, never intended to invent a currency.
- In late 2008, Cryptocurrencies emerged as a side product of “A Peer-to-Peer Electronic Cash System”.
- His major innovation was to achieve consensus without a central authority.

The originator of cryptocurrency is believed to be a name called Satoshi Nakamoto. However, it is not confirmed whether he is a single person or a group of people. He anonymously invented the currency but never intended to build one.

In late 2008, Cryptocurrencies emerged as a side product of “peer-to-peer” cash system. The single most important part of Satoshi’s invention was that he found a way to build a decentralized digital cash system in which he achieved consensus without a central authority.

## WHAT ARE THEY REALLY?

- Cryptocurrencies in a simple definition, is just limited entries in a database no one can change without fulfilling specific conditions.
- They are entries about token in decentralized consensus-databases.
- They are built on public supply and demand, and are totally controlled by this.

Now you must be thinking what exactly are Cryptocurrencies?

If you take away all the noise around Cryptocurrencies and reduce it to a simple definition, they are just limited entries in a database which no one can change without fulfilling certain specific conditions. They are entries about a token in a decentralized consensus database, which is called a blockchain.

They are built on public supply and demand and are controlled by them. It is because of this, high volatility comes into the picture.

## BASICS OF CRYPTOCURRENCY

- **Public Ledgers:** Confirmed transactions are stored in a public ledger known as Blockchain. The ledger ensures that corresponding “digital wallets” can calculate an accurate spendable balance.
- **Transactions:** A transfer of funds between two digital wallets is called a transaction. When a transaction is made, wallets use an encrypted electronic signature to provide a mathematical proof.
- **Mining:** It is the process of confirming transactions and adding them to a public ledger. The mining process is what gives value to the coins and is known as a proof-of-work system.

We will now turn our attention towards the basics of Cryptocurrency. What are all the basic things that you must clear before going further into details?

**Public ledgers:** They confirm transactions that are stored in a public ledger known as Blockchain. The ledger ensures that corresponding “digital wallets” can calculate an accurate spendable balance to maintain uniformity in the whole transaction process.

**Transactions:** A transaction is a transfer of funds between two digital wallets. When a transaction is made, wallets use an encrypted electronic signature to provide a mathematical proof which is used by miners in the process of mining.

**Mining:** It is the process of confirming transactions and adding them to a public ledger. The mining process is what gives value to the coins and is known as a proof-of-work system.

So these are the very basic concepts related to Cryptocurrency. And, now we will look for the characteristics of Cryptocurrencies.

## CHARACTERISTICS

- **Irreversible:** A transaction can't be reversed, when it is confirmed.
- **Secure:** Cryptocurrency funds are locked in a public key cryptography system, only the owner of the private key can send cryptocurrency.
- **Permission less:** There is no authorization that can prevent you from receiving and sending Cryptocurrencies.
- **Fast:** Transactions can be propagated instantly and gets confirmed in a couple of minutes.
- **Pseudonymous:** Identities are not linked with accounts or transactions.

The first thing about Cryptocurrency is that it is irreversible. This means that transaction can't be reversed once it is confirmed. So you have to be very sure about the receiver's address before making any transaction.

The next big feature about Cryptocurrency is that, it's very secure. It means that only the person who is aware of the private key of the address can make transactions.

Permission-less, is another nice feature related to Cryptocurrency, which clarifies that there is no authority with whom you have to deal with.

The transaction is very fast, can be propagated instantly and gets confirmed in just a couple of minutes.

Pseudo-anonymity also makes count on these characteristics; it means that our identities are not linked with accounts or transactions.

So, now we are well-versed with the basic details of Cryptocurrency. And, now we will formulate our own definition of Cryptocurrency, so that we don't have to learn some xyz definition.

## DEFINITION?

- Lets build our own definition
- It's a digital asset
- It has no intrinsic value
- It has no physical form and exists only in the network
- Highly secure and Uses cryptography
- Is completely decentralised
- Generally exist over peer-to-peer network

So here is our definition:

“Cryptocurrency is a digital asset which is virtual and has no intrinsic value created over a secure decentralized database which stores information immutably over peer-to-peer network”

It's a digital asset. It has no intrinsic value, no physical form and exists only in the network. It is highly secure and uses cryptography. It is also completely decentralized generally existing over a peer-to-peer network.

So, here is our definition:

“Cryptocurrency is a digital asset which is virtual, and has no intrinsic value, created over a secure decentralized database which stores information immutably over peer-to-peer network.”

This will now help you to memorize the definition more easily.

## SUMMARY

- Cryptocurrencies are digital gold, sound money that is secure from political influence.
- It's the money that promises to preserve and increase its value over time.
- They are also a fast and comfortable means of payment with a worldwide scope, and are private and anonymous enough.
- They gave birth to an incredibly dynamic, fast-growing market for investors and speculators.
- They don't represent debts. They just represent themselves. They are money as hard as coins of gold.
- They opens the door for revolutionary technological possibilities

Finally, we will move on to the summary, which will give you a nice essence of the whole chapter.

Cryptocurrencies are digital gold or sound money that is secure from political influence. You don't have to worry about any third party seeking your wealth.

It's the money that promises to preserve and increase its value over time. A person who invested in it a few years back will surely have an idea about this aspect. They are also a fast and comfortable means of payment with a worldwide scope, private and anonymous enough.

They gave birth to an incredibly dynamic, fast-growing market for investors and speculators. Majority of the population are investing in Cryptocurrencies and are reaping booming benefits from this.

A very important fact related to cryptocurrency is that they don't represent debts. They just represent themselves. They are money as hard as coins of gold and they open the door for revolutionary technological possibilities in the coming future.

# CHAPTER 3

## How Cryptocurrency Work?



How Cryptocurrency works?

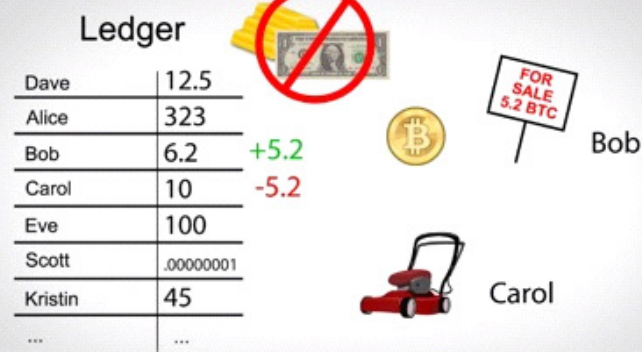
We will now go through the working of Cryptocurrency. This will explain how Cryptocurrency works under the hood to give a clearer idea what it means to own, send or mine Cryptocurrencies. Until now we have covered only a high-level overview of what a Cryptocurrency is?

## CONCEPT OF A LEDGER

- Cryptocurrency – just a basic file or a ledger that stores digital transactions. People generally make exchanges by making changes in the ledger.

For e.g. when Bob and Carol make transaction by sending 5.2BTC in exchange of fiat money then Bob balance goes up by 5.2BTC and Carol goes down by same amount which is reflected in the ledger

Ledger	
Dave	12.5
Alice	323
Bob	6.2 +5.2
Carol	10 -5.2
Eve	100
Scott	.00000001
Kristin	45
...	...



It is just a digital file that lists accounts and money like a ledger. It just stores digital transactions in the ledger by making changes in this ledger.

A copy of this file is maintained on every node that is a part of the Blockchain network.

These numbers stored in the ledger doesn't represent anything in the physical world. They only have some value because people believe in its value, and are willing to trade real goods and services in exchange for this value.

It's the same concept similar to fiat currency which also works on this principle. You don't have to maintain a ledger to use it and to send and receive money. E.g., when Bob and Carol make a transaction by sending 5.2BTC in exchange for fiat money then Bob's balance goes up by 5.2BTC and Carol's goes down by the same amount as reflected in the ledger.

## NO THIRD PARTY

- No government or banks are involved in the whole transaction process
- Decentralization is the core to this technology



Ledger

Dave	12.5
Alice	323
Bob	1
Carol	15.2
Eve	100
Scott	1000000
Kevin	45

There is no government and third party involved in backing this, or any other transactions that are being made in this network.

A person trades his real money in this system only because he has faith in the system that their money doesn't get lost, and then other people will also trust the system.

The first step is to create a ledger of each's payments to everyone else. This ledger will keep track of who owes money to whom and records everyone's payments to each other.

If no one is maintaining it, then how is your money safe and secure? Decentralization is the core of this technology, and that's why every participant is maintaining their copy of ledger.

# PEER-TO-PEER NETWORK

- Everyone exchanging Cryptocurrencies maintains the ledger and can see each other's balances.
- Ledger contains addresses of users instead of names to maintain anonymity.



One thing that made this concept more unique is that everyone can see everyone else's balance and there is complete transparency. Although, the real network only use account numbers and not names to maintain anonymity in the system.

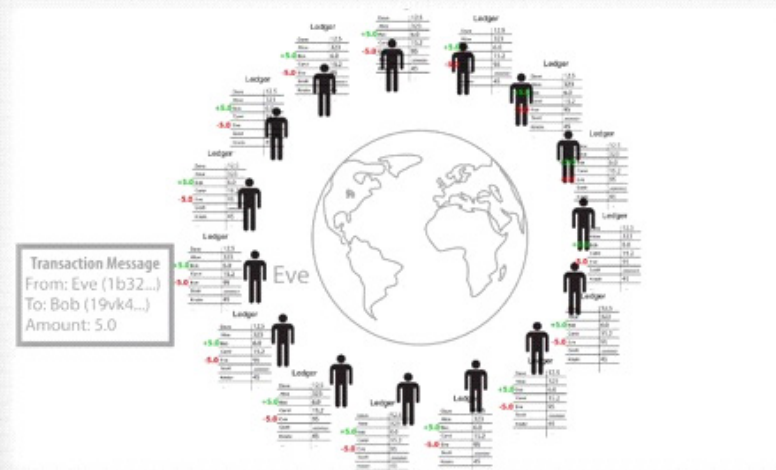
So now the question is, how all the transactions stored in the ledger are confirmed, and how they don't get corrupted?

In this way, one can safely exchange money without worrying about whether the people handling it are trustworthy or not. Instead of trusting a central authority or a government to ensure transactions, we can simply use cryptography to force everyone to play fair.

While Cryptocurrencies are still in its early stage, few years down the line, they might become the preferred way to make payments all over the world.

# TRANSACTION PROCESS

- Transaction is made by broadcasting a message with sender's address, receiver's address and amount.
- Then everyone's ledger gets updated.



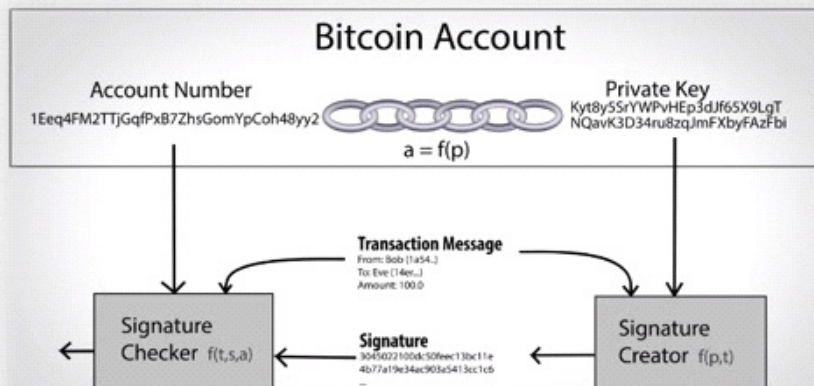
At the ground level, when one sends money, he simply tells everyone else in the system by broadcasting a message with his account number, receiver's account number, and the total amount.

Everyone across the world then updates their ledger through this transaction's information.

When the whole process is so simple that the money transfer only happens by making changes in this ledger, then how is security maintained? That takes us back to the concept of using a digital signature.

# SIGNATURE

- Signature which are stored in the form of public and private keys are used to encrypt the transaction, and make it unique each time a transaction is made.
- Then, miners check this signature using the public address and the text is passed in the form of a message to confirm the transaction.



Cryptocurrencies also require the digital signature technique to prove that the sender is the real owner of an account. It also requires a kind of password to unlock and spend funds, and this password is what's called a "Digital Signature." Whenever a new account is created, it comes along with a private key mathematically linked to that account.

A Cryptocurrency wallet, these keys are what it holds which allow you to create signatures. Like a real handwritten signature, it proves authenticity of a message, but it does so through a mathematical algorithm that prevents copying or forgery in the digital realm. Unlike a simple static password, an entirely different digital signature is required for every transaction.

A digital signature works by using two different but connected keys, a "private key" is used to create a signature, and a "public key" that others can use to check it. For creating a signature, a private key and the text from the transaction are fed into some special cryptographic function. Another function allows other people to check the signature, making sure that the account owner created it, and that it applies to that specific transaction.

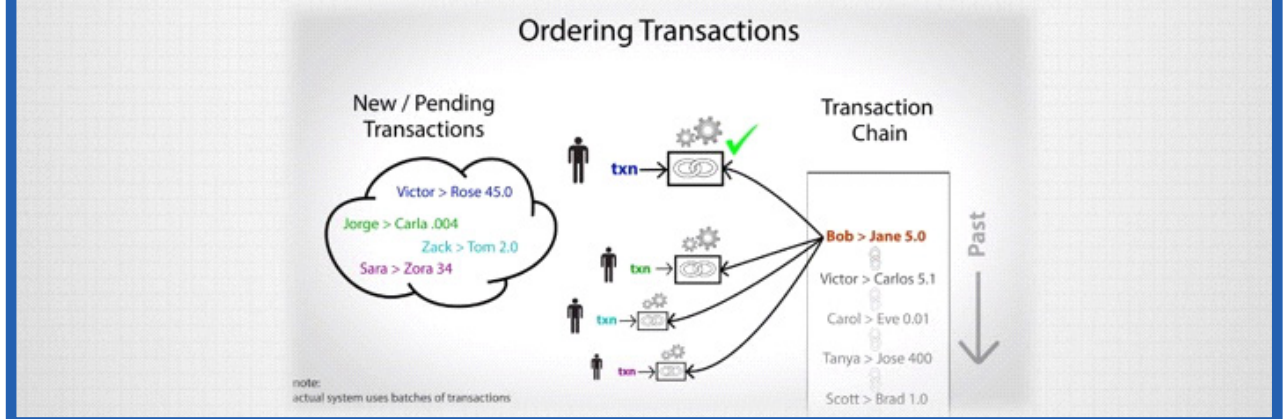
Private Key is used as a true password, and the signature acts as an intermediary that proves the password is correct, without revealing it. Public keys are the "send to" addresses, so when you send some money to someone, the public key is the address that one sends money to. To spend money, one must prove the true ownership of a public key address, where money was sent. They can do that by generating a Digital Signature from a transaction message and the private key.

The signature is completely dependent on the message, and this dependence of signature on the message also means that no one can modify the message while passing it along the network. It is because any changes to the message would invalidate the signature. Then, miners check this signature using the public address, and the text is passed in the form of a message to confirm the transaction.

## MINING



- Transactions are stored in a pool of pending transactions for miners to confirm the transaction and add it in a proper order in the ledger.
- It is done by solving a mathematical puzzle of cryptographic hash and by making a consensus on the transaction.
- It helps in making sure that all the transactions are valid.



As the mathematical signature proves who sent a transaction, they still can't prove when it was sent. There comes the need for mining and the miners. They help in preventing double spending of the transaction, for example: when Alice sends the 10\$ amount to Bob, and his account balance gets zero, he makes the next transaction of 10\$ to Carol. Then the next transaction will be refused to prevent double spending.

The order of these checks is critical, because it determines who should get paid. Unfortunately, the order is much harder to determine in Cryptocurrency. Network delays might cause transactions to arrive in different orders, at different places, and fraudsters can change the timestamps.

As new transactions are created, they go into a pool of pending transactions. And from here, they'll be sorted into a large chain that locks in their order.

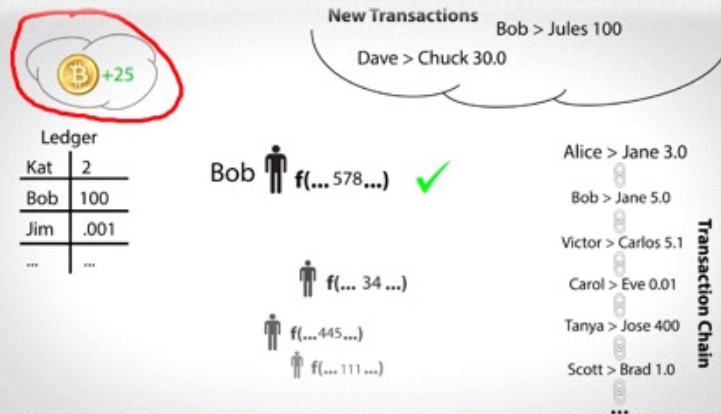
To select the order of the transaction which comes next, a kind of mathematical puzzle is solved. Participants select a pending transaction of their choice; begin to solve a puzzle that will link it to the end of the chain. The first person to solve the mathematical puzzle wins, and gets to have the transactions he has selected to go next in the chain.

In a real environment, these are batches of transactions. The mathematical problem is based on a special function called a cryptographic hash, which is calculated by making lots of guesses in the starting. And this is literally what people are doing in Cryptocurrencies.

They are just feeding this function random numbers until the output meets certain criteria. Besides a random guess, miners also input a transaction from the pending pool and chain, which is where the linking part comes in.

## HOW MONEY GETS CREATED?

- So, every time anyone makes a right guess and adds a transaction **then new coins gets created out of thin air** and is added to the account of that miner.
- Somewhere around 2140, this process will end and no more money is created in this manner.



Finally, how does the money get created? Every time someone solves the mathematical puzzle and adds the block to the longest chain, new Cryptocurrencies are created out of thin air and awarded to their account.

In case of Bitcoin, 12.5 BTC is created every time a new block is added. In case of Ether, 5 Ether are created. Solving this problem is commonly called "mining," as this is how money enters the system. But the entire purpose behind the math is to make sure everyone's ledger agrees.

The system simply provides a convenient way to distribute money into the world randomly. In fact, somewhere around 2140, no more money will be created, and participants will only be paid from fees added on to transactions.

## CRYPTO EXCHANGES

- Cryptocurrencies can only be exchanged through private, peer-to-peer transfers, that means they're not very liquid and are hard to value relative to other currencies – both crypto and fiat.
- Cryptocurrency exchanges play a valuable role in creating liquid markets for popular Cryptocurrencies and setting their value relative to traditional currencies.

Next thing is Cryptocurrency exchanges.

Cryptocurrencies can only be exchanged through private and peer-to-peer transfer. It means they're not very liquid and are hard to value relatively with other currencies – both crypto- and fiat.

Cryptocurrency exchanges play a valuable role in creating liquid markets for popular Cryptocurrencies and setting their value relative to traditional currencies.

# CHAPTER 4

## What are Exchanges?



In this section, we will discuss cryptocurrency exchanges. This will give you an idea about the exchanges, their working procedure, and factors one needs to consider before joining an exchange. So, we will start with what is an exchange exactly?

## WHAT IS IT?

- Websites where one can buy, sell or exchange Cryptocurrencies for other digital or traditional currency
- It is used to experience possession of real Cryptocurrencies
- It is used to avoid payment of the partly high fees for investment products

Online Cryptocurrency exchanges are websites where one can buy, sell or exchange Cryptocurrencies for other digital or traditional currency.

For professional traders who trade professionally and have access to fancy trading tools, they are likely to use an exchange that requires verifying ID and opening an account.

For occasional trading, some platforms can be used, which do not require an account. They are mainly used to avoid payment of the partly high fees for investment products. They are also used to experience possession of real Cryptocurrencies.

## TYPES OF EXCHANGES

- **By trading methodology**
  - **Trading Platforms:** Websites that connect buyers and sellers, take a fee from each transaction.
  - **Direct Trading:** Platforms offer direct person to person trading. These exchanges don't have a fixed market price, instead, each seller sets their own exchange rate.
  - **Brokers:** Websites that anyone can visit to buy Cryptocurrencies at a price set by the broker, similar to foreign exchange dealers.
- **By types of control**
  - Centralized Exchanges: e.g. Bittrex
  - Decentralized exchanges: e.g. EtherDelta

Cryptocurrency exchanges are categorized by trading methodologies, and by types of control they offer. Based on trading methodologies, one can directly trade, or trade through brokers, and trade on crypto trading platforms.

Trading platforms are the websites that connect buyers and sellers to each other and take some fee on each transaction. In direct trading, platforms offer direct person to person trading, where individuals from different countries can exchange currency.

Direct trading exchanges don't have a fixed market price; instead, each seller sets their exchange rate. And when trading is done through brokers, there are few websites which can be visited by anyone, to buy Cryptocurrencies at a price set by the broker. Cryptocurrency brokers are similar to foreign exchange dealers.

Based on control basis, exchanges are categorized as centralized and decentralized exchanges. Centralized exchanges are easy to use, access and provide advanced trading features like margin trading and few others. However, they also present a security risk for funds. While some exchanges are better guarded than others, hacks are not an uncommon event in the cryptocurrency market.


Some like the Bitfinex hack has led thousands of users losing their savings. There arises the need to exchange coins without entrusting them to a third party service. This is fulfilled by using decentralized exchanges which aren't controlled by a particular organization.

A decentralized exchange is an exchange market that does not rely on a third-party service to hold customer's funds, but instead, trades occur directly between users through an automated process.

Such a system can be achieved by creating proxy tokens, which are crypto assets that represent a certain fiat or cryptocurrency or assets, or through a decentralized multi-signature system, among other solutions that are currently being developed.

The most obvious benefit of using a decentralized exchange over a centralized one is their “trustless” nature. There is no need to trust the security or honesty of the exchange since you hold the funds in your wallet and not by a third party.

Another advantage of the decentralized model is the privacy it provides. Users are not required to disclose their details to anyone, except if the exchange method involves bank transfers, in which case your identity is revealed only to the person that is selling or buying from you. Furthermore, the hosting of decentralized exchanges is distributed through nodes meaning that there is no risk of server downtime.




## THINGS TO LOOK OUT FOR

- Reputation
- Fees
- Payment Methods
- Verification
- Geographical Restrictions
- Exchange Rate

It is important to do a little research before one starts trading. Here are a few things one should consider before making their first trade. Reputation is the first thing to consider, and the best way to find out about an exchange is to search through reviews from individual users and well-known industry websites where one can ask questions. Most exchanges have fee-related information on their websites. Before joining, make sure you understand deposit, transaction and withdrawal fees. Fees can differ substantially from exchange to exchange.

Payment methods: What payment methods are available in the exchange? Credit and debit card? Wire transfer? PayPal? If an exchange has limited payment options, then it may not be convenient for you to use it. Remember that purchasing Cryptocurrencies with a credit card will always require identity verification and come with a premium price, as there is a high risk of fraud, and high transaction and processing fees. Purchasing Cryptocurrency via wire transfer will take significantly longer time, as it takes time for banks to process.

Geographical restrictions: Some specific user functions offered by exchanges are only accessible from certain countries. Before you start trading, it is essential to make sure that the exchange you want to join allows full access to all platform tools and functions in the country where you currently live in. And the last thing one needs to check is the exchange rate information because different exchanges have different rates.



## SOME GOOD EXCHANGES

- These are best exchanges in no specific order based on user-friendliness, fees, accessibility and security
  - Bittrex
  - Poloniex
  - Kraken
  - Coinbase
  - Bitfinex

Now we will discuss some famous exchanges in no specific order, based on factors like user-friendliness, fees, accessibility, and security. These are Bittrex, Poloniex, Kraken, Coinbase, and Bitfinex.

We will discuss these exchanges, their working and the features they offer in detail in upcoming sections. Let's start with Bittrex.

# BITTREX

- Bittrex is one of the largest crypto to crypto exchanges offering a large number of trading pairs into Bitcoin - including all the major crypto coins such as Litecoin, Dash and Blackcoin. They also offer Tether and Ethereum.
- The exchange does have a very high turnover crypto currencies - leading some to accuse it of allowing pump and dump schemes that erode confidence in the crypto currency ecosystem as a whole.
- They do have very good security with two factor authentication and are United States based.
- It also provides support for Algorithmic trading



# BITTREX

Bittrex is one of the largest crypto to crypto exchanges which offer a large number of trading pairs into Bitcoin, including all the major crypto coins such as Litecoin, Dash, etc. There are hundreds of coins listed on this exchange. It brands itself as the next-generation digital currency exchange and offers a lot of features.

Bittrex is the world's third-largest cryptocurrency exchange, by trading volume only behind Bitfinex and Bithumb. Moreover, the exchange team also thoroughly checks for new altcoins' source code before adding it to the exchange. In the past, some Cryptocurrencies have tried to get it listed on exchanges as parts of a mere pump-and-dump scheme. While it is true some of those scam coins still get through the verification process now and then.

Bittrex is doing what they can, improving the overall quality of their listings. The exchange does have very high turnover Cryptocurrencies that lead some people to blame it for allowing pump and dump schemes that erode confidence in the Cryptocurrency ecosystem as a whole. One of the things that set Bittrex apart from some other exchanges is their main focus on security. They do have very good security with two-factor authentication.

Bittrex is also known for having multiple trading market categories. All of their supported coins can be traded against Bitcoin, which will always be the largest market for any Altcoins. Additionally, there is also an Ether market where currencies can be traded against Ether. For now, those markets are very limited, and neither of the trading pairs is witnessing any volume. Some fiat currencies are also supported in the form of USD-Tether and BitCNY which are not the most popular markets either by any means.

There are also verified markets, and those suffering from liquidity. They also provide support for Algorithmic trading which is a trading system that utilizes advanced and complex mathematical models and formulas to make high-speed decisions and transactions in the financial markets. It involves the use of fast computer programs and complex algorithms to create and determine trading strategies for optimal returns.



## POLONIEX

- It is a pure crypto-to-crypto currency exchange based in the United States. With a grand redesign in early 2015 the site has added a wealth of features to provide a fully immersive trading experience.
- Poloniex cryptocurrency exchange offers maximum security and advanced trading features.
- Poloniex allows its customers to transact with fiat currencies across the exchange and Blockchain without the volatility concerns related to Bitcoin or Altcoins.
- Poloniex stores the majority of customer deposits in offline air-gapped cold storage. They only keep enough to facilitate active trading, minimizing risk and exposure.
- The company also offers margin trading, allowing users to borrow money to invest in Ethereum or Bitcoin for an Interest rate



Poloniex, it is pure crypto to crypto exchange based in the United States. With a grand redesign in early 2015, the site has added a wealth of features to provide a fully immersive trading experience. The features are technical analysis charts and live chat which means it is easy to stay abreast of news flow and easy interpretation of price trends before taking a position.

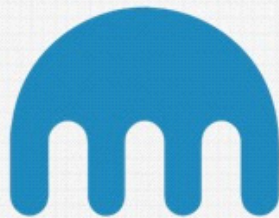
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The company also offers margin trading, allowing users to borrow money to invest in Ethereum or Bitcoin for an interest rate. Buying on margin means to borrow money from a broker, so as to purchase some token or Cryptocurrency from that borrowed money.

To trade on margin, one needs to have a margin account, which is different from a regular cash account, in which you trade using the money in the account.

## KRAKEN

- **Kraken** is a US based prominent Bitcoin exchange operating in Canada, the EU, Japan, and the US, and "the world's largest Bitcoin exchange in euro volume and liquidity".
- It currently has oversight of Mt. Gox claims for lost Bitcoin. In June 2016, Kraken added Ethereum Dark Pool trading for large Bitcoin buyers.
- In April 2017, Kraken launched fiat funding options to transfers denominated US dollars and government-issued currencies



Kraken is a US based prominent Bitcoin exchange operating in Canada, the EU, Japan, and the US. It is also the world's largest Bitcoin exchange in euro volume and liquidity. It currently has oversight of Mt. Gox claims for lost Bitcoin.

In June 2016, Kraken added Ethereum Dark Pool trading for large Bitcoin buyers. Dark pools are networks of privately held trading forums, exchanges or markets that provide a platform for anonymous trading of securities.

In April 2017, according to the reports, Kraken launched fiat funding options to transfer denominated US dollars and government-issued currencies.

## COINBASE

- **Coinbase** is a digital asset broker headquartered in San Francisco, California. They broker exchanges of Bitcoin, Ethereum, Litecoin and other digital assets with fiat currencies.
- Coinbase was founded in June 2012 by Brian Armstrong and Fred Ehrsam.
- Coinbase has two core products: a Global Digital Asset Exchange (GDAX) for trading a variety of digital assets on its professional asset trading platform, and a user-facing retail broker of Bitcoin, Ether, and Litecoin for fiat currency.
- It also offers an API for developers and merchants to build applications and accept payments in both digital currencies.
- It currently operates in 32 countries, and Bitcoin transactions and storage in 190 countries worldwide.



Coinbase is a digital asset broker headquartered in San Francisco, California. Coinbase is one of the popular and well-known brokers and trading platform in the world. It makes it easy to buy, use, store and trade digital currencies securely.

They offer broker exchanges of Bitcoin, Ethereum, Litecoin and other digital assets with fiat currencies in 32 countries, and Bitcoin transactions and storage in 190 countries worldwide.

It was founded in June 2012 by Brian Armstrong and Fred Ehrsam. It has two core products: a Global Digital Asset Exchange (GDAX) for trading a variety of digital assets on its professional asset trading platform, and a user-facing retail broker of Bitcoin, Ether, and Litecoin for fiat currency.

It also offers an API for developers and merchants to build applications and accept payments in both digital currencies. As of 2014, the company offered to buy/sell trading functionality in 25 countries, while the Cryptocurrency wallet was available in 190 countries worldwide.

They also provide the insurance policy coverage on the digital currency stored in their servers.

## BITFINEX

- **Bitfinex** is a crypto-currency exchange trading and currency-storage platform based out of Taiwan, owned and operated by iFinex Inc.
- In April 2017, Bitfinex announced that it was no longer able to let users withdraw their funds in USD, after Wells Fargo placed limitations on its wire transfers. As a consequence, Bitcoin were traded at a price around 100 USD higher than other exchanges as users started buying Bitcoin in order to move them to other exchanges and withdraw their funds there.
- Bitfinex is a full-featured spot trading platform for the major Cryptocurrencies such as Bitcoin, Bcash, Ethereum, Iota, NEO, Litecoin, EOS, Ripple, Bitcoin Gold, Dash, Zcash, Ethereum Classic, Monero, OmiseGO, ETP, Santiment, Qtum, Eidoo, Streamr, and Aventus.
- The platform offers leveraged margin trading through peer-to-peer funding market.
- In 2016, Bitfinex was hacked, and \$72 million in Bitcoin was stolen from its customers.

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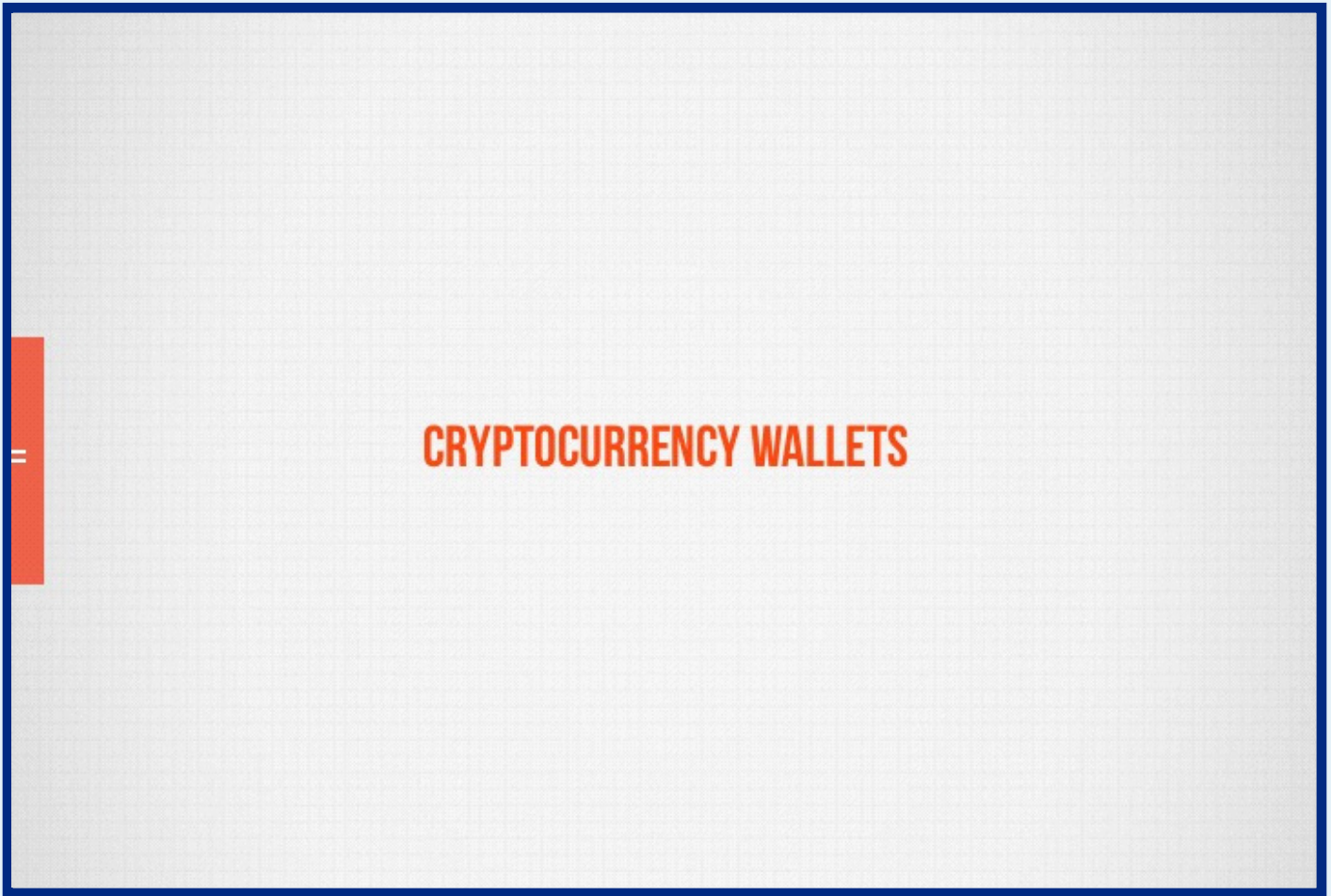
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In 2016, Bitfinex was the subject of the Bitfinex hack. In it, \$72 million in Bitcoin and 119,756 units of Bitcoin was stolen from the company's customer accounts. Immediately, Bitcoin trading price plunged by 20% after this breach.

# CHAPTER 5

## Cryptocurrency Wallets



This section is about Cryptocurrency wallets and will also give you the details about wallets, their working, types and some famous wallets. It will also explain the security threats related to these wallets. Let's start by learning the basics of these wallets.



## WHAT ARE THEY?

- A secure digital wallet is used to store, send, and receive digital currencies.
- A software program that stores private and public keys and interacts with various blockchain.
- Cryptocurrency itself is not actually "stored" in a wallet.
- Instead, a private key (secure digital code) is stored that shows ownership of a public key.
- It stores your private and public keys, allows you to send and receive coins, and also acts as a personal ledger of transactions.

The first thing to note is that, if you want to use Bitcoin or any other cryptocurrency, you will need a digital wallet. Cryptocurrency wallets are secure digital wallets used to store, send and receive digital currencies online.

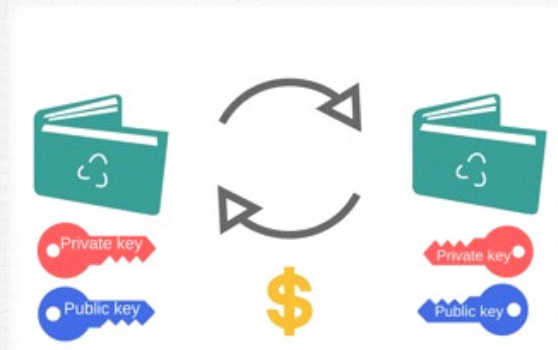
It is a software program that stores public and private keys and interacts with different Blockchains to enable users to send and receive Cryptocurrency and monitor their balance.

Most coins have an official wallet or a few officially recommended third-party wallets. Cryptocurrency itself is not stored in the wallet. Instead, a private key that is secure digital code which is known only to you is stored that shows ownership of a public key which is a public digital code that is connected to a certain amount of currency.

So your wallet stores private and public keys that allow you to send and receive coins, and it also acts as a personal ledger of transactions.

## HOW THEY WORKS?

- Digital wallets don't store currency, transaction is signified merely by a transaction record on the blockchain and a change in balance in your cryptocurrency wallet.
- When a person sends you a digital currency, they are essentially signing off ownership of the coins to your wallet's address.
- To be able to spend those coins and unlock the funds, the private key stored in your wallet must match the public address to which the currency is assigned.
- If public and private keys match, the balance in your digital wallet will increase, and the senders will decrease accordingly.



The next thing is the working procedure of Cryptocurrency wallet, how private and public keys are stored in the wallet, which gives a much clearer picture to you.

Digital wallets don't store currency; the transaction is signified just by a transaction on the Blockchain and the change in balance from your Cryptocurrency wallet. It is used to monitor balance, send money and conduct other operations.

When a person sends any digital currency, they are essentially signing off ownership of the coins to wallet's address. To be able to spend those funds and unlock them, the private key must match the public address the particular currency is assigned to.

If public and private keys match, the balance in the crypto wallet will increase, and the sender's will decrease. There is no actual exchange of some real coins. The transaction is signified merely by a transaction record on the Blockchain and a change in the balance of Cryptocurrency wallet.

## TYPES OF WALLETS

- **Hot Wallet:** Hot wallets are less secure because of the risks internet access poses to your privacy and security, however they are much more user-friendly.
- **Cold Wallet:** Cold wallets are used for the “cold storage” of Cryptocurrencies, and are stored offline for improved security. They’re more like a real-world safe or a vault than a leather wallet you carry with you for day to day transactions.
- **Multisig Wallet:** It is also known as a “multisignature” wallet, refers to cryptocurrency wallets that require input from multiple parties in order to complete a transaction.
- **Multi-Currency Wallet:** Some wallets only hold one type of cryptocurrency, while others will allow you to store multiple types of Cryptocurrencies in one place. For example, a wallet like Exodus can store several currencies such as Bitcoin, Ether, EOS, Dash, and others.
- Hardware, Software and Paper wallet are three other types of wallets.

There are different types of wallets that can be used, including offline, online, hardware, mobile, desktop, and paper. Each “type” refers to whether or not the data is stored online and what type of medium the wallet is stored on. Some wallets offer more than one way of accessing the wallet, for, e.g., Bitcoin wallet is both a desktop application and a mobile app.

The types of wallets are:

Hot wallet, “hot wallet” is a wallet that is connected to the internet. And that’s why they are less secure because of the risks internet access poses to security and privacy; however, they are much more user-friendly.

Cold wallets are used for the “cold storage” of Cryptocurrencies and are stored offline for improved security. They’re more like a real-world safe or a vault than a leather wallet you carry with you for day to day transactions. When cryptocurrency is in “cold storage,” that means it is being held offline. Funds which you are using like cash should be in hot wallets, funds you want to store long term are best held in “cold storage” in an offline wallet.

Other types of wallet include Multisig wallet which is also known as a “multi-signature” wallet, refers to Cryptocurrency wallets which requires input from multiple parties to complete transactions. They add a level of security and comfort to a process that moves a lot of funds quite quickly. If you’re interested in using the variety of Cryptocurrencies, the good news is that you don’t need to set up a separate wallet for each currency. Instead of using a Cryptocurrency wallet that supports a single currency, it may be more convenient to set up a multi-currency wallet which enables you to use several currencies from the same wallet.

Multicurrency wallet allows you to store multiple types of Cryptocurrencies in one place. For example, a wallet like Exodus can store several currencies such as Bitcoin, Ether, EOS, Dash, and others.

## SOFTWARE WALLET

- **Desktop:** A desktop wallet is considered somewhat more secure than both an online (web) wallet and mobile wallet, however that depends on your commitment to online security. It is only accessible from the single computer in which they are downloaded.
- **Online:** typically cryptocurrency wallets that you access via your web browser. In some cases people refer to all hot wallets as online wallets.
- **Mobile:** It provide access to your Cryptocurrencies wherever you are with your mobile device and provide additional features above and beyond wallets that are completely internet-based, however they also come with additional security risks.

Software wallet is of three types desktop, online and mobile. A desktop wallet is considered more secure than both an online wallet and mobile wallet; however security depends on your commitment to online security.

It is only accessible from the single computer in which they are downloaded. It is typically an app that connects directly to a coin's client.

An online wallet is typically Cryptocurrency wallet that you access via your web browser. In some cases, people refer to all hot wallets as online wallets. It is a web-based wallet. You don't download an app, but rather data is hosted on a real or virtual server.

Some online wallets are hybrid wallets allowing encryption of private data before being sent to the online server.

And the last of the software wallet is mobile wallet, it provides access to Cryptocurrencies wherever you are with your mobile device, and presents additional features beyond other wallets, that are entirely internet-based. Though, they also come with additional security risks. It is a wallet that runs on a smartphone app.

## HARDWARE WALLET

- A hardware wallet is a special type of wallet which stores the user's private keys in a secure hardware device like a USB.
- They have some major advantages over other standard wallets:
  - private keys are often stored in a protected area of a microcontroller, and cannot be transferred out of the device in plaintext
  - immune to computer viruses that steal from software wallets
  - can be used securely and interactively, as opposed to a paper wallet which must be imported to software at some point
  - much of the time, the software is open source, allowing a user to validate the entire operation of the device

A hardware wallet is a special type of wallet which stores the user's private keys in a secure hardware device like a USB. Although these wallets make transactions online, they are stored offline that delivers more security. Hardware wallets are compatible with several web interfaces and support different currencies; it just depends on which one you decide to use.

What's more, making a transaction is super easy. Users simply plug in device to any internet-enabled computer or device, then enter a pin, send currency and confirm. These devices can go online for making transactions and get data, and then can be taken offline for transportation and security.

Some major advantages over other standard wallets are that private keys are often stored in a protected area of a microcontroller, and cannot be transferred out of the device in plaintext. It is immune to computer viruses that steal from software wallets.

It can be used securely and interactively, as opposed to a paper wallet which must be imported to software at some point. Most of the time, the software is open source, allowing a user to validate the entire operation of the device.

## PAPER WALLET

- Paper wallets are an offline cold storage method
- It is referred to a piece of software that is used to securely generate a pair of keys which are then printed.
- The keys are printed in the form of QR codes which you can scan in the future for all your transactions.
- It gives complete control to user, that's why it is considered safest.



Paper wallets are an offline cold storage method. It is referred to a piece of software that is used to securely generate a pair of keys which are then printed on a paper. The keys are printed in the form of QR codes which you can scan in the future for all your transactions. It gives complete control to the user, that's why it is considered safest.

These wallets are easy to use and provide a very high level of security. While the term paper wallet can simply refer to a physical copy or printout of your public and private keys, it can also refer to a piece of software that is used to generate a pair of keys which are then printed securely.

Transferring Bitcoin or any other cryptocurrency to your paper wallet is accomplished by the transfer of funds from your software wallet to the public address that is shown on your paper wallet.

Alternatively, if you want to withdraw or spend funds, just transfer funds from paper wallet to software wallet. This process which is often referred to as 'sweeping,' can either be done manually by entering your private keys or by scanning the QR code on the paper wallet.

## SECURITY CONCERNS

- **Backup your wallet:** Store only small amounts of currency for everyday use. Online or offline storage options for backup like Ledger Nano or paper or USB will protect you against computer failures and allow you to recover your wallet
- **Update software:** Keep your software up to date so that you have the latest security enhancements available. Regularly update wallet software and also update software on computer or mobile.
- **Add extra security layers:** Setting long and complex passwords, two-factor authentication and additional pin code, multisig wallet requires the permission of another user or users.

Wallets are secure to varying degrees. Security level depends on the type of wallet you use, desktop, mobile, online, paper, hardware wallet and also depends on the service provider. A web server is a riskier environment to keep your currency as compared to offline. Online wallets can expose users to possible vulnerabilities in the wallet platform which can be exploited by hackers to steal your funds. Offline wallets, on the other hand, cannot be hacked because they simply aren't connected to an online network and don't rely on a third party for security. Although online wallets have proven to be the most vulnerable to hacking attacks, persistent security precautions required, must be implemented and followed when using any wallet.

Remember, no matter which wallet you use, losing your private keys will lead you to lose money. Similarly, if wallet gets hacked, or you send money to a scammer, there is no way you can reclaim lost currency or reverse that transaction. You must take precautions and be very careful. So you must consider these steps before using crypto wallets. The first thing is to make a backup of the wallet, store only small amounts of currency for everyday use online, on your computer or mobile, keeping the vast majority of your funds in a high-security environment.

Cold or offline storage options for backup, like LedgerNano or paper or USB, will protect you against computer failures, and allow you to recover your wallet if it gets lost or stolen. It will however not protect you against hackers. The reality is, if you choose to use an online wallet, there are internal risks that can't always be protected against.

The next thing is to keep up to date software, to have the latest security enhancements available. You should regularly update not only your wallet software but also your computer or your mobile. Add extra security layers, more layers of security, better it is. Setting complex passwords and ensuring any withdrawal of funds requiring password, is just a start. Use wallets that have good reputation and provide extra security layers like two-factor authentication and additional pin code requirements every time a wallet application gets opened. And you must also consider a wallet that offers multisig transactions.



Some famous cryptocurrency wallets are Jaxx wallet, which is a multi-currency wallet and has a user interface. It is available on a variety of devices and platforms like Windows, Linux, Chrome, Firefox, OSX, Android mobile & tablet, iOS mobile & tablet and connects with websites through Firefox and Chrome extensions.

Armory, an open source Bitcoin desktop wallet is perfect for experienced users that emphasize security. Some of Armory's features include cold storage, multi-signature transactions, one-time printable backups, multiple wallets interface, GPU-resistant wallet encryption, key importing, key sweeping and more.


The Mycelium mobile wallet allows iPhone and Android users to send and receive Bitcoin and keep complete control over Bitcoin. No third party controls your funds. With enterprise-level security which is superior to most other apps and features like cold storage and encrypted PDF backups, an integrated QR-code scanner, a local trading marketplace and secure chat amongst others, you can understand why Mycelium has long been regarded as one of the best wallets on the market.

Copay is one of the best crypto wallet available in the market. It is easily accessed through a user-friendly interface for desktop, mobile or online service. One of the best things about it is, that it's a multi-signature wallet, so friends or business partners can share funds. Overall, it has something for everyone; it's simple enough for entry-level users but has plenty of additional geeky features that will impress more experienced players as well.

Trezor is a hardware Bitcoin wallet that is ideal for storing large amounts of Bitcoin. Trezor can't be infected by malware and never exposes your private keys, which makes it as safe as holding traditional money. Trezor is an open source and transparent, with all technical decisions taken from wider community consultation. It's a bit easy to use, has an intuitive interface and is OSX, Windows, and Linux friendly. One of the few disadvantages of the Trezor wallet is that it must be with you for sending Bitcoin.

This, therefore, makes Trezor best for inactive savers, investors or people who want to keep large amounts of Bitcoin highly secure. There are many more wallets available in the market now a day. So first explore and research properly, then only choose a wallet according to your necessity.

II



## SHAPESHIFT

- ShapeShift is a part of the Cryptocurrency ecosystem that helps in digital asset exchange. This platform gives you the power to quickly swap between blockchain assets without creating any account.
- It does not require any signup process, no bid and ask orders and you don't have to store or send money on any Cryptocurrency exchange.
- ShapeShift is primarily intended to be used as an API.
- They also provide an option for return address for failed orders.
- The only charge the **"miner fee"**, which is different for each coin or token. There is no exchange fee, or service fee.
- **Fast processing:** Small deposits are processed with zero confirmations. Larger deposits wait for at least 1 confirmation.
- **No price slippage:** It means you get a specific exchange rate for your order, which does not change based on the size of your order.

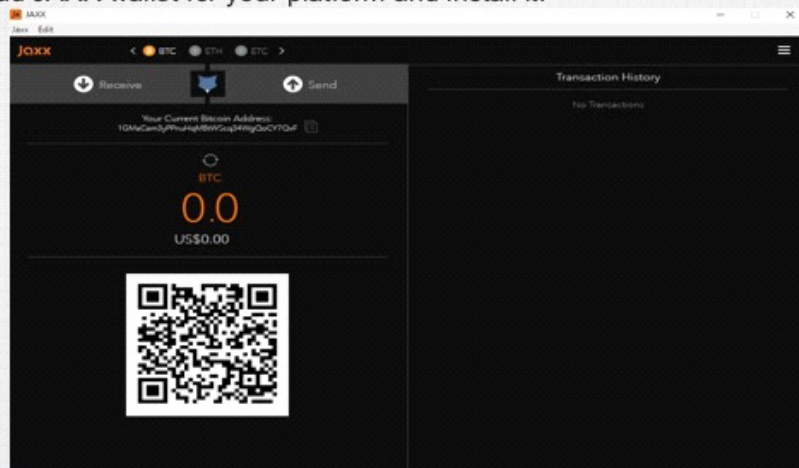
ShapeShift is a part of the Cryptocurrency ecosystem that helps in digital asset exchange. This platform gives you the power to swap between Blockchain assets without creating an account quickly. It does not require any lengthy signup process, no bid and ask orders and you don't have to store or send money on any Cryptocurrency exchange.

ShapeShift is primarily intended to be used as an API. They also provide an option for a return address for failed orders. They only charge the "miner fee," which is different for each coin or token and it appears on the screen while you make any exchange, while there is no exchange fee or service fee.

Some features of ShapeShift are fast processing that means small deposits are processed with zero confirmation while larger deposits wait for at least one confirmation. And, no price slippage which means you get a specific exchange rate for your order, which does not change based on the size of your order.

## HOW TO USE?

- Some wallets like JAXX, Exodus, BitGo Instant, IndieSquare and KeepKey have integrated ShapeShift.
- For this course, we have used JAXX wallet to show working of ShapeShift's asset transfer.
- Download JAXX wallet for your platform and install it.



Now, see how you can use it for making asset exchanges.

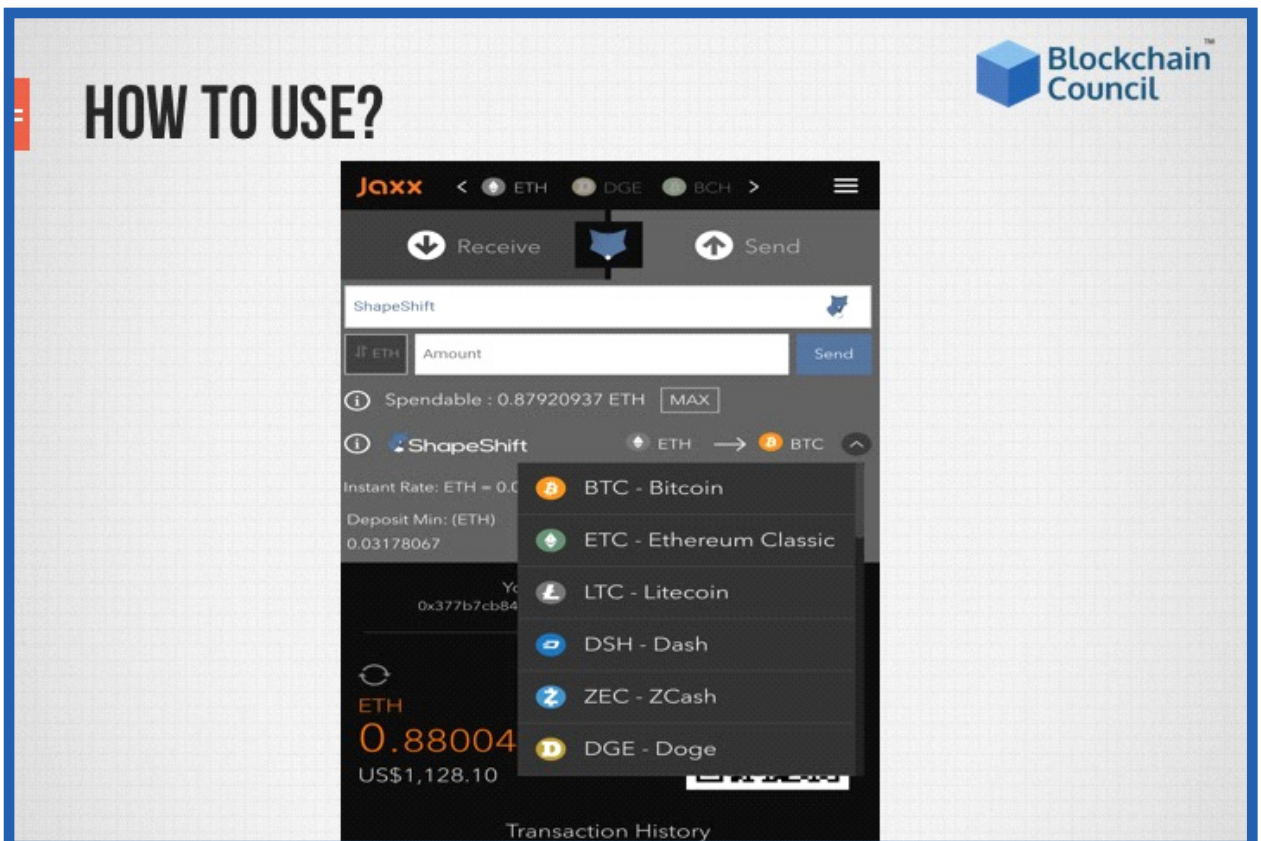
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Unzip it and get started with JAXX.

You will see an interface as shown above.



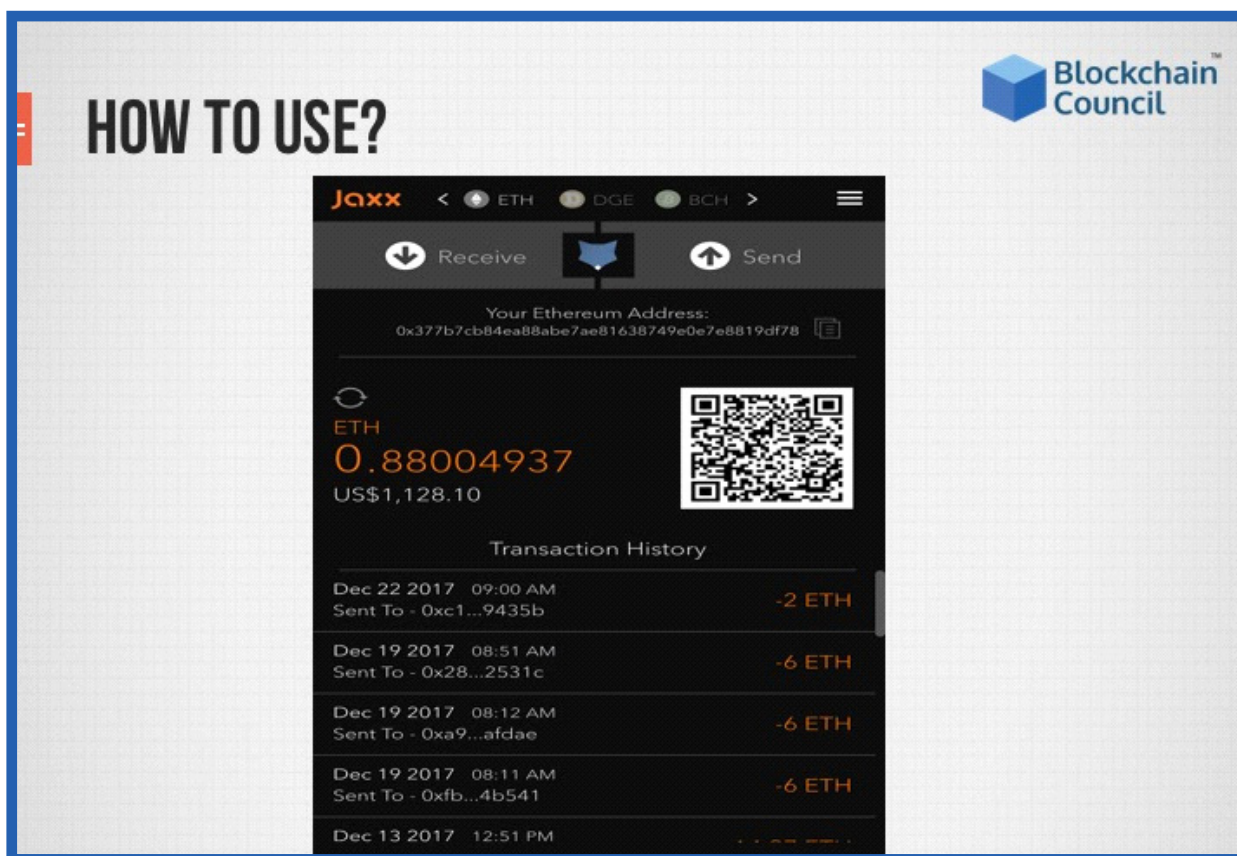
Then deposit some BTC to your Jaxx BTC address and then you will be able to make the exchange.



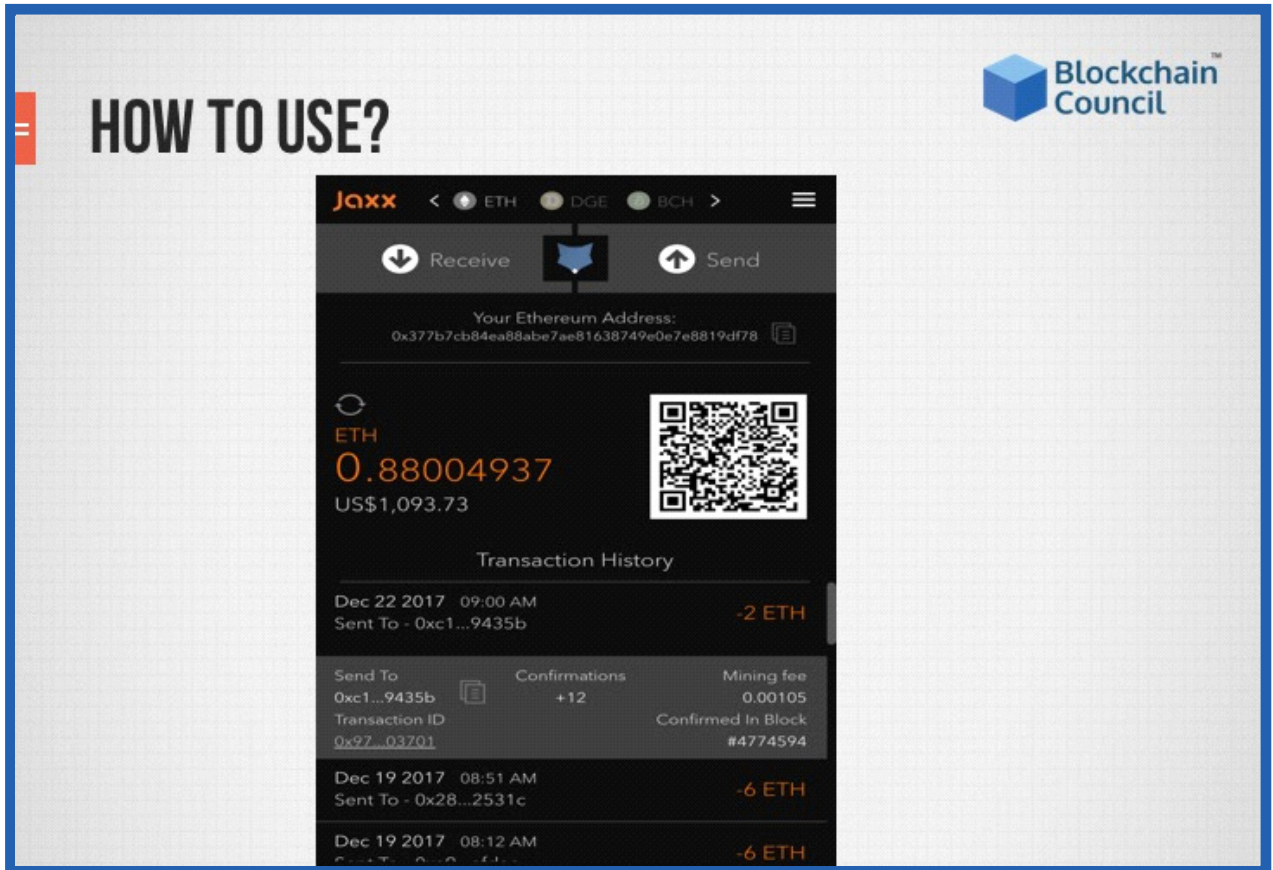
Now, for making an exchange, just click on the ShapeShift or the fox icon and you will get an interface like this. Select a type of coin for exchange. Look at the instant rate and calculate how many you need to exchange. Enter amount in BTC and click on shift button.

Make sure that your calculations are right and click confirm.

This is the screenshot for that, and you will receive a similar window.



And, here is the window for the confirmation. You check everything before pressing confirm button and then proceed.

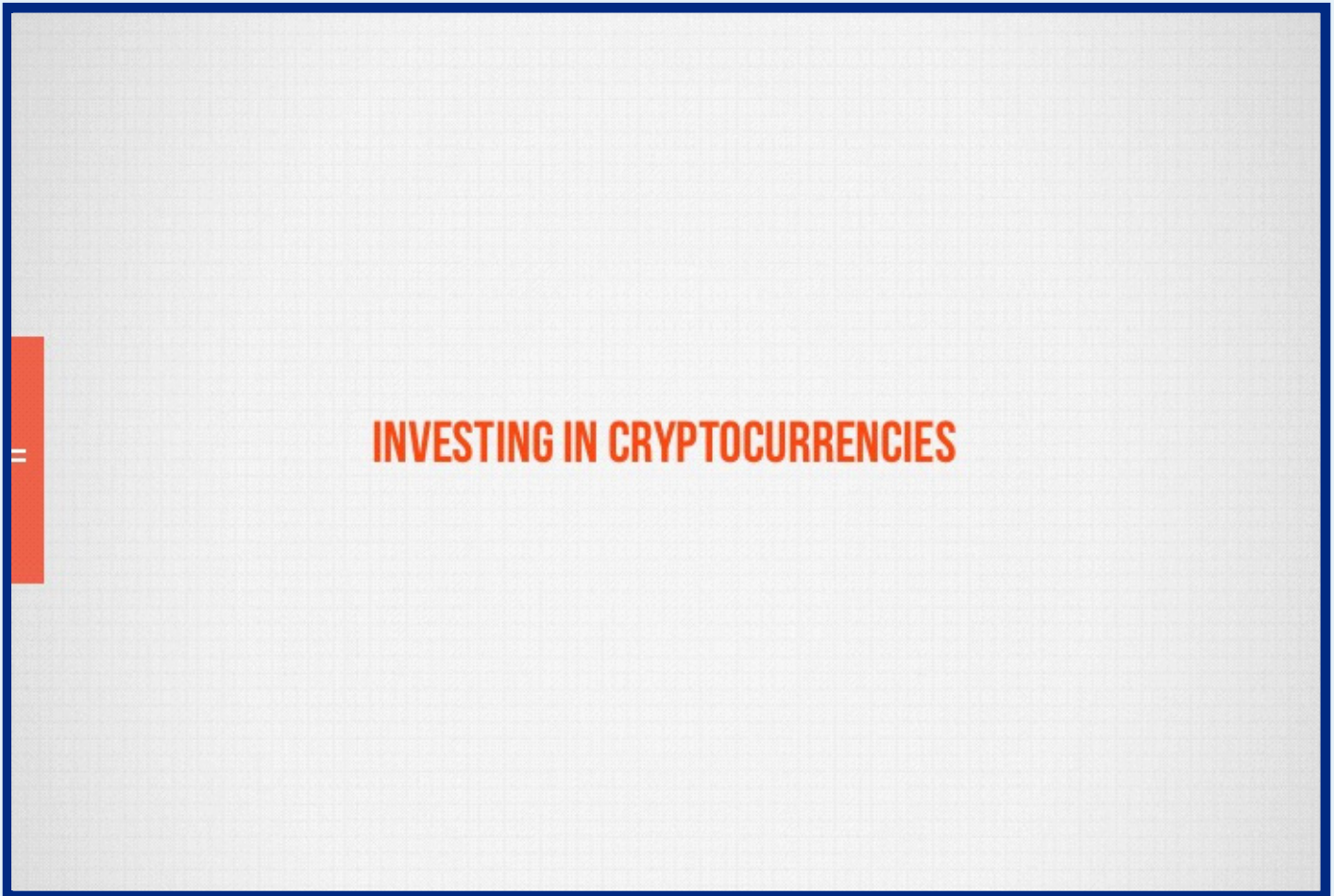


After a couple of minutes, your exchange would succeed and will receive a window like this. Do remember that with any wallet, if you lose your private key, then you will also lose your money.

That's true for hardware wallets, paper wallets, or other wallet type. The reason you lose your keys doesn't matter, and there is no way to reclaim your Cryptocurrency without them.

# CHAPTER 6

## Introduction to Trading



Now you have an idea about Cryptocurrencies. You must be tempted to start investing and trading Cryptocurrencies which provides you an opportunity for making huge market gains in very less time. This will explain how you invest in Cryptocurrencies.

Why should you invest in them? What questions to ask before investing? How to get started? How to get good in trading?

We will give answers to the most important questions about investing in Cryptocurrencies, and will also explain some market rules and strategies to you. So let's get started with the Cryptocurrency investment.

## INTRODUCTION

- Cryptocurrencies so have some of the best ROIs in the history. Virtual currencies like **Bitcoin** and **Ethereum** are definitely by far the hottest investment product.
- These immutable cryptographic token promises to become a hard cash in the future.
- Buying and keeping Cryptocurrencies is like a bet on the success of this silent revolution of money.
- These markets are highly volatile, and involves equal chances of huge success and failure.

Cryptocurrencies have some of the best ROIs in the history. Virtual currencies like Bitcoin and Ethereum are definitely by far the hottest investment product. Since 2011, Bitcoin generated an increase in the value of at least 25,000 percent. Since May 2016, Ethereum value shot up by 2,700 percent, and that maybe the fastest rally a cryptocurrency ever demonstrated.

And talking about all Cryptocurrencies – the complete market cap soared by 10,000 percent since mid-2013. So surely this market has the potential to make such price soaring in the future also. So, the important advice is to only invest as much as you can afford to lose and keep on living if all of it goes to zero. These immutable cryptographic token promises to become hard cash in the future, and that's why one can believe in the value of Cryptocurrency.

Buying and keeping Cryptocurrencies is a bet on the success of this silent revolution of money. These markets are highly volatile and involve equal chances of huge success and failure. Cryptocurrencies don't trade like currencies at all.

One of the primary reasons for it is that there's a cap on the number of coins that any given currency will ever have in circulation. Central banks like the Federal Reserve can print more money to manage inflation and support countries' economic policies, while Bitcoin will eventually have a maximum of 21 million coins in circulation, based on the algorithm that controls its distribution.

## II DECIDE WHAT YOU WANT

- Investing in Cryptocurrencies is just like investing in shares, but only riskier.
- First, you should choose how much extra money you have to invest.
- By extra money, we mean that only invest an amount you can afford to lose.
- Second, choose whether you want to be a buy-and-holder or a day trader?
- It entirely depends on the amount of **extra money** and the time you can contribute.
- Day-to-day trading requires more time. Because you have to update yourself with daily news in the market and trade accordingly.
- Long term investment requires that you trust the product and the people behind it.
- The most important thing to note is that the information is not even close to evenly distributed, everybody is playing with partial information and a fog of war.

Now it's time to consider the things which you must be sure of before investing in Cryptocurrencies. Here are a few important things so that you can decide what you exactly want by making this kind of an investment. Investing in Cryptocurrencies is just like investing in shares, but only riskier because of the high volatility of this market.

First, you must choose how much extra money you have to invest. By extra money, we mean that only invest an amount you can afford to lose. Because there are a lot of people who are making profits on someone else's money, and if you are not smart enough then that someone else could be you. If you don't have a lot of money, start small. Don't go out emptying all your pockets and bank accounts, your credit cards or getting a "loan" from others. You'll only get burned.

Second, choose whether you want to be a buy-and-holder or a day trader? It entirely depends on the amount of extra money and the time you can contribute. Day-to-day trading requires more time and more knowledge, and that's why you have to keep updating yourself with daily news in the market and trade accordingly. Long-term investment needs that you trust the product and the people behind it. These are two very different things.

By a big margin, the right strategy for most people is just to buy and hold. Get some well-known Cryptocurrencies like Bitcoin, Ethereum, Dash, or Litecoin, put them in cold storage, stick to them and forget about them. Don't read the news; don't worry about the wild swings or the predictions of losing everything from anyone who tries to misguide you. Just buy, hold and forget. In a year or two, cash them out and sell some of them and buy a little more with the proceeds.

Wash, rinse and repeat until retirement. This could be a strategy you can follow. The most important thing to note is that the information available to us or anyone in the world out there is not even close to evenly distributed; everybody is playing with partial information and a fog of war. And, no one can predict exactly what could happen in the coming future. So you are your king in the market.

## RULES TO PLAY THE MARKET

- If you want to trade however, that is a different beast all together. That means you're looking to get in and out of the market.
- The rules of the game are simple: Buy low, sell high.
- Most people crash and burn on the second part. Everyone makes money in a bull market and then most give it right back afterwards.
- By a wide margin, the right strategy for most people is to just buy and hold.
- Trading is very unpredictable, on the days you win, ***it's the ultimate rush***. On bad days though, it's brutal. You'll be depressed, angry, and scattered brained.

Let's discuss some rules to play this market if you want to trade. However, that's a different beast altogether that means you're looking to get in and out of the market fast. The rules of the game are simple you just buy low and sell high.

There are two parts to this game; one is making money and the second one is keeping it. Most people crash and lose in the second part. Everyone makes money in a bull market and then most give it right back afterward.

Trading is very unpredictable, on the days you win, it's the ultimate rush. But on the bad days though, it's brutal. You'll feel depressed, become angry and scatter brained.

## RULES TO PLAY THE MARKET

- If you miss a trade, stay out of the market. Get them next time.
- But FOMO (Fear of missing out), the force is strong with FOMO and not you or anyone else is immune to it. No matter how good you get, you'll regularly and repeatedly shoot yourself in the foot.
- It's a perfect system. Binary. You win or lose. There is no in between. If you are winning then one must be losing.
- Being "right" when you're wrong is a great way to lose money, never do that.
- One more thing to note is "trading with leverage" in the crypto is like the dumbest thing to do.

The next important rule is that, if you miss a trade, then try to keep out of the market and get them next time. But FOMO (Fear of missing out), this force is powerful, and no one is immune to it. That means no matter how good you get; you'll regularly and repeatedly make the same mistake of entering the market at the time when it is highly volatile.

It's a perfect binary system in which you will win or lose; there is no middle ground. Again the same thing, if your bank balance is going up, then someone must be losing the money. Being "right" when you're wrong is a great way to lose money. People get very attached to their opinions and cling to their opinions desperately with the hope that their opinion becomes true, and in that hope, they continue to lose their money.

It is advised to burn your opinions because your opinions mean nothing to the market. It's like if you thought a bull market was starting and it turns into a bear, your opinion was wrong. Leave your opinion and move on as quickly you can. One more thing to note is "trading with leverage" in the crypto is the dumbest thing to do. The crypto markets move very fast and you can easily lose money that you can't afford to lose, which is not good at all.


Technical analysis works pretty well in crypto trading because everyone is using this analysis and works accordingly. It also works because there's a lot of machine trading going on. You'll be trading against bots regularly on the exchanges, and they have no choice but to make decisions based on such strategies.

The other reason it works is that technical analysis is all about psychology. People want to take gains and cut losses. After a certain amount of rising, it's going to fall. It's just natural.


## HOW TO GET STARTED?

- Ensure you are doing everything safely and securely
- Choose exchanges and wallets smartly
- Keep a track of market trends
- Analyze the market with technical and market analysis
- Read chart patterns
- Integrate it with desired use-case


To get started, you must ensure that you are doing everything safely and securely. You must choose exchanges and wallets smartly, because of various breaches in the exchanges and wallets. You should also keep track of market trends by making technical and market analysis actively. Just read chart patterns and then integrate your Cryptocurrency with the desired use-case.



# CURRENT MARKET ANALYSIS



Since, 2013 Bitcoin has seen a 12,000 percent increase in prices



Since, 2015 Ethereum has seen a 400 percent increase

And talking about all Cryptocurrencies – the entire market cap soared by 10,000 percent since mid-2013.

Current market analysis: In the first picture you can see the rise in the price of Bitcoin, which has 12,000 percent increases in price since 2013. In the second picture, you can see the surge in the price of Ethereum which has seen a 400 percent increase in its price.

And talking about all Cryptocurrencies, the complete market cap soared by 10,000 percent since mid-2013.

## GETTING GOOD AT TRADING

- We all have a lot to learn and the sooner we start doing it, the better we get. Your goal is to learn something every day for the rest of your life.
- The books recommended for getting good at trading:
  - **Way of the Turtle** by *Curtis M. Faith*
  - **One Up On Wall Street** by *Peter Lynch*
  - **Encyclopedia of Chart Patterns** by *Thomas N. Bulkowski*
- And of course, even after you read all these books, try to remember: The way to get better is to **get in the game**. There is no substitute for **personal experience**.
- To get started with the crypto market start trading at some popular Cryptocurrency trading platforms that provides you with the best trading tools.

To start with, you should start reading actively and instantly. We have a lot to learn and the sooner we do it, the better we get. The goal must be to learn something every day and for the rest of the time you continue to trade.

The books recommended for getting good at trading are: 'Way of the Turtle' by Curtis M. Faith, 'One up on Wall Street' by Peter Lynch and 'Encyclopedia of Chart Patterns' by Thomas N. Bulkowski. Even after you read all these books, try to remember that the way to get better is to get in the game.


There is no substitute for personal experience so you should get hands-on experience with trading by investing a small amount, and then try to understand the market that how it plays and how you have to play to win in this market. And the last thing to do is to get started with the crypto market, by starting trading at some popular cryptocurrency trading platforms that provide you with the best trading tools.

## REASONS FOR NEWBIE'S LOSS

- Trade too big
- Trade without an edge, or in other words—gamble
- Over trade
- Trade low price junk stocks
- Use excessive leverage

There are some common reasons for the loss of a newbie, and you should avoid these mistakes. Some of these mistakes are they make bigger trades which are not easy to recover, sometimes they trade without an edge which is the really dangerous thing to do with your hard earned money, or in other words is a gamble.

Overtrade is also not acceptable in this market. You must not trade low price junk stocks for which you have to analyze the market properly and then make any investment. Using excessive leverage is a very bad thing to do because crypto markets move too fast and you can easily lose money that you can't afford to lose, that too in a very small amount of time.



## REASONS TO INVEST

- Future Currency
- Blockchain technology is here to stay
- No third Party involvement
- Quick and Easy way of Earning
- No Consent or approval required

We all are quite aware of this market and its volatility. Here are some reasons to invest in this market. The first one is pretty simple, Blockchain technology is here to stay, and there is no point in denying that because of the use cases it offers. The next reason to invest is the decentralized nature of the Cryptocurrency, which nullifies any third party involvement while making any transaction.

With the trend of the price of Bitcoin and Ethereum, one can easily say that it is a quick and easy way of earning money, that too in a large amount. No consent or approval is required while we buy any Cryptocurrency, or while we make a trade in Cryptocurrency, so it is a smooth process. And the last thing to note is that it is a future currency as predicted by many and we have to accept it now before it gets too late.

In the upcoming chapters, you will learn what you should do before trading, and how to trade.

# CHAPTER 7

## Types of Crypto Trading



Let's have a look at different types of trading strategies.

## TYPES OF TRADING BY STRATEGY

- Long term trading
  - Buy and Hold
- Short term trading
  - Algorithmic trading
  - Social signal trading
  - Day trading
  - Swing trading
- Arbitraging
- Mining
- Staking
- Margin Trading
- Range Trading
- Momentum Trading

Mainly we have two trading strategies, long term and short term. But some other types of trading are: Arbitraging, Mining, Staking, Margin Trading, Momentum Trading, and Range trading.

Basically these are the ways by which you can earn, or more specifically you can have some coin or token in your account. In long-term strategy you use buy and hold strategy for trading. While for short-term trading you can use Algorithmic trading, Social signal trading, Swing trading and Day trading strategies.

## LONG TERM

- **Buy and Hold:**
  - It is a passive investment strategy in which an investor buys stocks and holds them for a long period of time, regardless of fluctuations in the market.
  - An investor who employs it actively selects coins or tokens, but once in a position, is not concerned with short-term price movements and technical indicators.
  - A buy-and-hold strategy has tax benefits because long-term investments tend to be taxed at a lower rate than short-term investments.
  - Some core position trading skills: Contrarian thinking and Macroeconomic analysis

A long term trading or position trading is a strategy that may play out over periods of weeks, months or even years. These traders often base their strategies on long-term macroeconomic trends of different economies. They also typically operate with low levels of leverage and smaller trade sizes with the expectation of possibly profiting on large price movements over a long period of time.

These traders are more likely to rely on fundamental analysis, together with technical indicators to choose their entry and exit levels. This type of trading may require greater levels of patience and stamina from traders, and may not be desirable for those seeking to turn a fast profit in a day-trading situation.

It's also important to remember that a buy-and-hold strategy works best when you've done all the proper research to ensure that you buy a high-quality Cryptocurrency. It's a gamble to buy coin randomly without doing the proper research.

A key benefit of this style of trading is the amount of time required. The investment of time and energy is minimal, as buy-and-hold traders don't have to regularly check up on coin's information, price histories, or even market performance overall.

Other benefits of this approach include: lesser fees and low maintenance as buy-and-hold traders don't have to track crypto market movements, meaning that their overall workload to maintain their portfolio is low.

It also creates low anxiety as buy-and-hold traders usually invest in companies that are not volatile. There is less chance that the coins these traders invest in, will suddenly fluctuate, so the process can be less nerve-wracking.

It also generates bonus for dividend growth investors, as the dividend rate raises, a buy-and-hold traders yield on cost will also increase, providing a bonus.

Some buy-and-hold traders plan to hold their stocks indefinitely, selling only if they need the money.

## SHORT TERM

- **Algorithmic Trading:**
  - It is a trading system that utilizes advanced and complex mathematical models and formulas to make high-speed decisions and transactions in the financial markets.
  - It involves the use of fast computer programs and complex algorithms to create and determine trading strategies for optimal returns.
  - It is most commonly used by large institutional investors due to the large amount of shares they purchase every day.
  - Complex algorithms allow these investors to obtain the best possible price without significantly affecting the stock's price and increasing purchasing costs.
- **Social Signal Trading:**
  - It is the utilization of user-generated content, crowd-wisdom, for the act of trading.
  - Social trading sites provide users with a variety of community-based tools in order to give them the information needed for making smarter investment and trading decisions.
  - It builds on the concept that the collective wisdom of thousands of traders is better than the wisdom of one.

And, now let's discuss about short term trading strategies. Short-term trading is one of the most popular trading approaches adopted by traders because it gives you instant gratification. First see what is algorithmic trading?

Algorithmic trading also referred to as algo trading and black box trading. It is a trading system that utilizes advanced and complex mathematical models and formulas to make high-speed decisions and transactions in the financial markets. Algorithmic trading involves the use of fast computer programs and complex algorithms to create and determine trading strategies for optimal returns.

Electronic platforms can completely operate investment and trading strategies through algorithmic trading. As such, algorithms are able to execute trading instructions under particular conditions in price, volume, and timing. Algorithmic trading is most commonly used by large institutional investors due to the large amount of shares they purchase every day. Complex algorithms allow these investors to obtain the best possible price without significantly affecting the coin's price and increasing purchasing costs.

Another type is social trading. "Social trading" or "social investing" is the most recent evolution of online trading, and more of its potential is being realized every day. Social trading is the utilization of user-generated content, and crowd-wisdom, for the act of online trading. Social trading sites provide their users with a variety of community-based tools in order to give them the information needed for making smarter investment and trading decisions. For example, a social trading platform would enable its users to see other users' portfolios, read their news feeds, and look at their overall performance, to gain a better understanding of trading strategy.

Social Trading is considered one of the major ways to earn extra income online without spending too much time. By following successful traders, you replicate their success and hence make profit without having to trade yourself.


Here are some reasons for using social trading networks:

Major advancements have been made in the field of social trading and numerous social trading networks are now freely available for all traders and newbies to choose from.

Through Social Trading; you will have access to multiple trade ideas and signals allowing you to allocate your portfolio to several providers, hence spreading the risks associated with individual decisions.

If you are an experienced and profitable trader, you can also earn extra revenue by connecting to social trading networks and providing your trades to followers for copying.

It is helpful for newbies to learn trading from expert traders, catch their strategies and then work accordingly.



## DAY TRADING

- Day traders seek to make money by exploiting minute price movements in individual assets usually leveraging large amounts of capital to do so.
- In deciding what to focus on a typical day trader looks for three things: liquidity, volatility and trading volume.
- Day traders trade for a living, not simply as a hobby or for a "gambling high." These traders are typically well-established in the field and have in-depth knowledge of the marketplace.
- Day traders always close their positions at the end of the day.

Other types of short term trading strategies are Day and Swing trading.

Day trading is a business, and it's an intensely serious one. You have to wake up early in the morning, do your preparations every day on the coins that you plan to trade, and be thoroughly prepared before the market opens. You must always be ready. Day trading requires proper tools, software and education. As with any business, you must have the right tools to succeed.

A compelling question to begin with is: What do you look for as a day trader? The answer is simple. First, you're looking for coins that are moving in a relatively predictable manner. Secondly, you are going to trade them in one day. You will not keep any position overnight.


Some typical characteristics of day traders are:

In deciding what to focus on, a typical day trader looks for three things: liquidity, volatility and trading volume. Day traders buy coins in the hope that their price will go higher. This is called buying long, or simply long. Day traders seek to make money by exploiting minute price movements in individual assets, usually leveraging large amounts of capital to do so.

Day traders trade for a living, not simply as a hobby or for a “gambling high.” These traders are typically well-established in the field and have in-depth knowledge of the marketplace. Day traders always close their positions at the end of the day.

Day trading is a difficult skill to master, requiring as it does time, skill and discipline. Many of those who try it fail. There is one final rule we should mention: Set a maximum loss per day that you can afford to withstand – both financially and mentally.

Whenever you hit this point, take the rest of the day off. Stick to your plan and your perimeters. After all, tomorrow is another trading day.



## SWING TRADING

- Swing Trading is a short-term trading method that can be used when trading Cryptocurrencies.
- Swing Trading positions typically last two to six days, but may last as long as two weeks.
- The goal of swing trading is to identify the overall trend and then capture gains with swing trading within that trend.
- Swing traders usually look for tokens and currencies that have strong hold and that they know won't lose their entire value overnight.

Swing trading is a form of trading in which you hold stocks over a period of time, generally from one day to a few weeks. It is a completely different style of trading, and you shouldn't use the strategies and tools that you use for day trading to do swing trading.

Swing trading is a short-term trading method that can be used when trading Cryptocurrencies. Swing trading positions typically last two to six days, but may last as long as two weeks.

The differences between swing trading and day trading are similar to the differences in owning a restaurant and owning a food delivery company. They both involve food, but they are very different: they operate with different time frames, regulations, market segments and revenue models.

One of the key differences between day trading and swing trading is the approach to coin or token picking. Swing traders usually look for shares in solid currencies that they know won't lose their entire value overnight. For day trading, however, you can trade anything, including currencies that will soon go bankrupt, because you don't care what happens at the end of the day. In fact, many of the currencies that you will day trade are too risky to hold overnight, because they might lose much of their value in that short period.

The goal of swing trading is to identify the overall trend and then capture gains with swing trading within that trend. Swing traders usually look for tokens and currencies that have strong hold and that they know won't lose their entire value overnight.



## OTHER TRADING TYPES

- **Arbitraging:** Arbitrage is the simultaneous purchase and sale of an asset to profit from a difference in the price. It is a trade that profits by exploiting the price differences of exchanges on different markets or in different forms. It exists as a result of market inefficiencies.
- **Mining:** Mining is only possible on Cryptocurrencies that follow the Proof of Work protocol. It takes some effort to setup and gets things running, but it is attractive as a long-term passive income as long as you frontload the work.
- **Staking:** Staking is the Proof of Stake version of 'mining.' Think of this as making dividends on your stock. The reward rate and staking method differ greatly among Proof of Stake coins, but in general, it takes less effort as compared to mining.
- **Range Trading:** Range trading is based on the idea that prices can often hold within a steady and predictable range for a given period of time.
- **Momentum Trading:** Momentum trading and momentum indicators are based on the notion that strong price movements in a particular direction are a likely indication that a price trend will continue in that direction.

Some other trading methods are: Arbitraging, Mining, Staking, Margin Trading, Momentum Trading and Range Trading.

Arbitrage is the simultaneous purchase and sale of an asset to profit from a difference in the price. It is a trade that profits by exploiting the price differences of exchanges on different markets or in different forms. It exists as a result of market inefficiencies.

Mining is a way of having or earning tokens or coins by solving the cryptographic hash related to the Cryptocurrencies. Mining is only possible on Cryptocurrencies that follow the Proof of Work protocol. It takes some effort to setup and get things running, but it is attractive as a long-term passive income as long as you frontload the work.

Another such method is Staking; it is the Proof of Stake version of 'mining.' Think of this as making dividends on your stock. The reward rate and staking method differ greatly among Proof of Stake coins, but in general, it takes less effort as compared to mining. Like in NEO, by holding shares of NEO you generate dividends in the form of GAS tokens.

Momentum trading and momentum indicators are based on the notion that strong price movements in a particular direction are a likely indication that a price trend will continue in that direction. Similarly, weakening movements indicate that a trend has lost strength and could be headed for a reversal. Momentum strategies may take into consideration both price and volume, and often use analysis of graphic aides like oscillators and candlestick charts.

Range trading is a simple and popular strategy based on the idea that prices can often hold within a steady and predictable range for a given period of time. Range traders rely on being able to frequently buy and sell at predictable highs and lows of resistance and support, sometimes repeatedly over one or more trading sessions. Range traders may use some of the same tools as trend traders to identify opportune trade entry and exit levels.

MARGIN TRADING



- For traders with a limited amount of crypto resources, i.e. Bitcoin and altcoins, there is the option of margin trading in order to add leverage to the investment.
- It is important to mention that margin trading is not recommended for everyone and it has a very high risk.
- Margin trading is possible due to the existence of the lending market. Lenders provide loans to traders so they can invest in larger amounts of coins, and lenders benefit from interest on the loans.
- In some exchanges, users provide the loans for the margin markets and in others the exchange itself provides them.
- The cost of the margin position includes paying the interest for the borrowed coins (whether to the exchange or to other users), and fees for opening a position with the exchange.

And the last and most risky trading strategy is Margin trading strategy.

For traders with a limited amount of crypto resources, i.e. Bitcoin and Altcoins, there is the option of margin trading in order to add leverage to the investment. It is important to mention that margin trading is not recommended for everyone and it has a very high risk. It is possible due to the existence of the lending market. Lenders provide loans to traders so they can invest in larger amounts of coins, and lenders benefit from interest on the loans. In some exchanges, users provide the loans for the margin markets and in others the exchange itself provides them. The cost of the margin position includes paying the interest for the borrowed coins (whether to the exchange or to other users), and fees for opening a position with the exchange.



## TIPS FOR MARGIN TRADING

- Watch closely – Although the daily fees or margin position is negligible, in the long term the fees can amount to a significant sum.
- Extreme movements – Crypto trading sometimes has extreme fluctuations that occur in both directions.
- When trading on margin it is important to understand that there are clear rules of risk management.
  - Beware of excessive greed.
  - Take into account amount you are willing to risk, keeping in mind it can all be lost.
  - Set clear levels for closing positions, taking profit or a stop loss.

Here are some tips for Margin trading:

First is watch closely; although the daily fees or margin position is negligible, in the long term the fees can amount to a significant sum.

Extreme movements – Crypto trading sometimes has extreme fluctuations that occur in both directions.

When trading on margin, it is important to understand that there are clear rules of risk management like beware of excessive greed, take into consideration the amount you are willing to risk, keeping in mind that it can all be lost and always set clear levels for closing positions, taking profit or a stop loss.

Traders have a wide variety of strategies at their disposal to try to interpret price movements and take advantageous trading positions. Some traders may use a particular approach almost exclusively, while others may employ a variety or hybrid versions of the strategies described above.

While none is guaranteed to work all the time, traders may find it useful to familiarize themselves with a number of strategies to build an arsenal of available tools for adapting to changing market conditions.

# CHAPTER 8


## Risk Management



To be a successful day trader, you need to master three essential components of trading: sound psychology, a series of logical trading strategies, and an effective risk management plan. These are like the three legs of a stool - remove one and the stool will fall. It is a typical beginner's mistake to focus exclusively on trading strategies.

Often, beginner traders who fail to make money in the market get frustrated and go out and try to learn more about how the markets work, study new strategies, adopt additional technical indicators, follow some different traders, and join other chat rooms. They don't realize that the main cause of their failure is often a lack of self-discipline, the making of impulsive decisions and sloppy risk and money management, not their technical knowledge.

A good trading strategy delivers positive expectancy; it generates greater profits than losses over a period of time. But, never forget, even the most carefully executed strategy does not guarantee success in every single trade. No strategy can assure you of never having a losing trade or even suffering a series of losing trades. This is why risk control must be an essential part of every trading strategy. Always remember the famous trading expression “live to play another day”.



## WHY IT MUST BE USED?

- Risk management is an essential but often overlooked prerequisite to successful active trading.
- Typically it is way behind finding a better indicator, more accurate entry signals or worrying about stop hunting and unfair algo-trading practices.
- A trader needs to understand how to manage his risk, size his positions, create a positive outlook for his performance, and set his orders correctly, if he wants to become a profitable and professional trader.
- Traders should always know when they plan to enter or exit a trade before they execute.

Risk management is an essential but often overlooked prerequisite to successful active trading. After all, a trader who has generated substantial profits over his or her lifetime can lose it all in just one or two bad trades if proper risk management isn't employed. In this chapter, we will discuss some simple strategies that can be used to protect your trading profits.

To be a successful trader, you must learn risk management rules and then firmly implement them. You must have a line in the sand that tells you when to get out of the trade. It's going to be necessary from time to time to admit defeat and say, “I was wrong,” or “The setup isn't ready yet,” or “I'm getting out of the way.”

## POINTS TO CONSIDER

- Make your battle plan ahead of time so you'll already know you've won the war.
- Respect price, respect risk and always be prepared for any outcome.
- Realize that any outcome is always possible and that markets or stocks can unwind at any time for any reason, or for no reason at all.

Just remember these points that you need to consider for making a sound plan for risk management. The very first is planning ahead of time, "Every battle is won before it is fought". The phrase implies that planning and strategy - not the battles - win wars. Similarly, successful traders commonly quote the phrase: "Plan the trade and trade the plan." Just like in war, planning ahead can often mean the difference between success and failure.

Always respect the price, respect risk and always be prepared for any outcome because that's very important. And do realize that any outcome is always possible and that markets or stocks can unwind at any time for any reason, or for no reason at all.

Considering such things before you make trade, could prove highly beneficial to you.

## QUESTIONS TO ASK?

- You essentially have three steps in managing risk. You need to ask yourself:
  - Am I trading the right cryptocurrency or token?
  - What share size should I take?
  - What is my stop loss?

How do you manage risk? You essentially have three steps in managing risk. You need to ask yourself, am I trading the right stock? Do remember that risk management starts from choosing the right stock to trade. You can have the best platform and tools, and be a master of many strategies, but if you are trading the wrong stock, you will definitely lose money.

You must avoid those Cryptocurrencies that are:

Heavily traded by computers and institutional traders, have small relative trading volume, are small priced coins and are therefore highly manipulated, and those who don't have any fundamental catalysts.

The next question to ask yourself is: What share size should I take? This depends on your account size and your daily target. If you are targeting \$ 500 a day, then 10 or 20 units might not be enough. You either have to take more units or increase your account size. If you don't have enough money to trade for a \$ 500 daily target, you should lower your daily goal.

And, the last question is what my stop loss is? A stop-loss point is the price at which a trader will sell a stock and take a loss on the trade. Often this happens when a trade does not pan out the way a trader hoped.

The points are designed to prevent the "it will come back" mentality and limit losses before they escalate. For example, if a stock breaks below a key support level, traders often sell as soon as possible.

On the other side of the table, a take-profit point is the price at which a trader will sell a stock and take a profit on the trade. Often this happens when additional upside is limited, given the risks. For example, if a stock is approaching a key resistance level after a large move upward, traders may want to sell before a period of consolidation takes place.

So, always put a stop loss for your trades to make profitable trades.

## TIPS FOR RISK MANAGEMENT

- **Plan your trade:** "Plan the trade and trade the plan." Just like in war, planning ahead can often mean the difference between success and failure. Stop-loss (S/L) and take-profit (T/P) points represent two key ways in which traders can plan ahead when trading.
- **Take spread seriously:** Those costs can result in significant drawbacks for your trading system and even turn a winning into a losing system. Therefore, start monitoring spread closely and avoid instruments or times where spreads are high.
- **Avoid break-even stops:** Moving the stop loss to the point of the entry and so creating a "no risk" trade is a very dangerous and often unprofitable maneuver.

Here are few tips that will help you improve your risk management instantly and avoid the most common problems that cause traders to lose money.

First is again planning, "plan the trade and trade the plan." Just like in war, planning ahead can often mean the difference between success and failure. Stop-loss (S/L) and take-profit (T/P) points represent two key ways in which traders can plan ahead when trading.

Successful traders know what price they are willing to pay and at what price they are willing to sell, and they measure the resulting returns against the probability of the stock hitting their goals. If the adjusted return is high enough, then they execute the trade.

Conversely, unsuccessful traders often enter a trade without having any idea of the points at which they will sell, either at a profit or a loss. Like gamblers on a lucky or unlucky streak, emotions begin to take over and dictate their trades. Losses often provoke people to hold on and hope to make their money back, while profits often entice traders to imprudently hold on for even more gains.

Next is taking spread seriously. For the most liquid instruments, spreads are usually just a few pips and, therefore, traders view them as they weren't even existent. Research shows that only about 1% of all day traders are able to profit net of fees.

It is advisable to avoid break-even stops. Moving the stop loss to the point of the entry and so creating a "no risk" trade is a very dangerous and often unprofitable maneuver. Whereas it's good and advisable to protect your position, the break-even strategy often leads to a variety of problems.

Especially if you are trading, based on common technical analysis (support/resistance, chart patterns, highs and lows, or moving averages), your point of entry is usually very obvious and many traders will have a very similar entry.

Of course, the pros know that and you can often see that price retraces back and squeezes the amateurs at the very obvious price levels, just before price turns back into the original direction. A break-even stop will get out of potentially profitable trades if you move your stop too soon.

## TIPS FOR RISK MANAGEMENT

- **Setting orders and the reward: risk ratio:** Measure the risk: reward ratio, if it doesn't match your requirements, skip the trade. Don't try to widen your take profit order or tighten your stop loss to achieve a higher reward :risk ratio.
- **Don't use daily performance targets:** Setting yourself daily goals creates a lot of pressure and it usually also creates a "need to trade".
- **Position sizing like a pro:** Following the approach of dynamic position sizing will help you reduce your account volatility and potentially help you improve account growth.

Setting orders and the reward: risk ratio. For this what you have to do is when you spot an entry signal, think where you'd place your stop loss and take profit order first. Once you've identified reasonable price levels for your orders, measure the risk: reward ratio. If it doesn't match your requirements, skip the trade. Don't try to widen your take profit order or tighten your stop loss to achieve a higher reward: risk ratio.

The reward of a trade is always uncertain and potential. The risk is the only thing that you can control about your trade. Most amateur traders do this the opposite way: they come up with a random reward: risk ratio and then manipulate their stop and profit orders to achieve their ratio.

Many traders will randomly set daily or weekly performance targets. Such an approach is very dangerous and you have to stop thinking in terms of daily or weekly returns. Setting yourself daily goals creates a lot of pressure and it usually also creates a "need to trade". Instead, here are some ideas on how to set trading goals the right way: Focus on the best possible trade execution and on how well you follow your rules/plan. Follow a professional routine, plan your trades in advance, obey your rules, journal your trades, review your trades and make sure that you learn the correct lessons. Review your trades, focusing on how well you executed your trades to get an understanding of your level of professionalism. Find weaknesses in your trading and adjust accordingly. This will lead to profitable trading inevitably.

And, the last tip for risk management is position sizing like a pro.

When it comes to position sizing, traders usually pick a random number such as 1%, 2% or 3%, and then apply it to all their trades without ever thinking about position sizing again. Trading is an activity of chance, such as professional betting or poker. In those activities, it's a common practice to vary the amount you wager based on the likelihood of the outcome. If you hold a very strong hand in poker, you'd bet more than when you see almost no chances of winning, right?

The same holds true for trading. If you trade multiple setups or strategies, you will see that each setup and strategy has a different win rate and also that the reward: risk ratios on different strategies vary. Thus, you should reduce your position size on setups with a lower win rate and increase the position size when your win rate is higher.

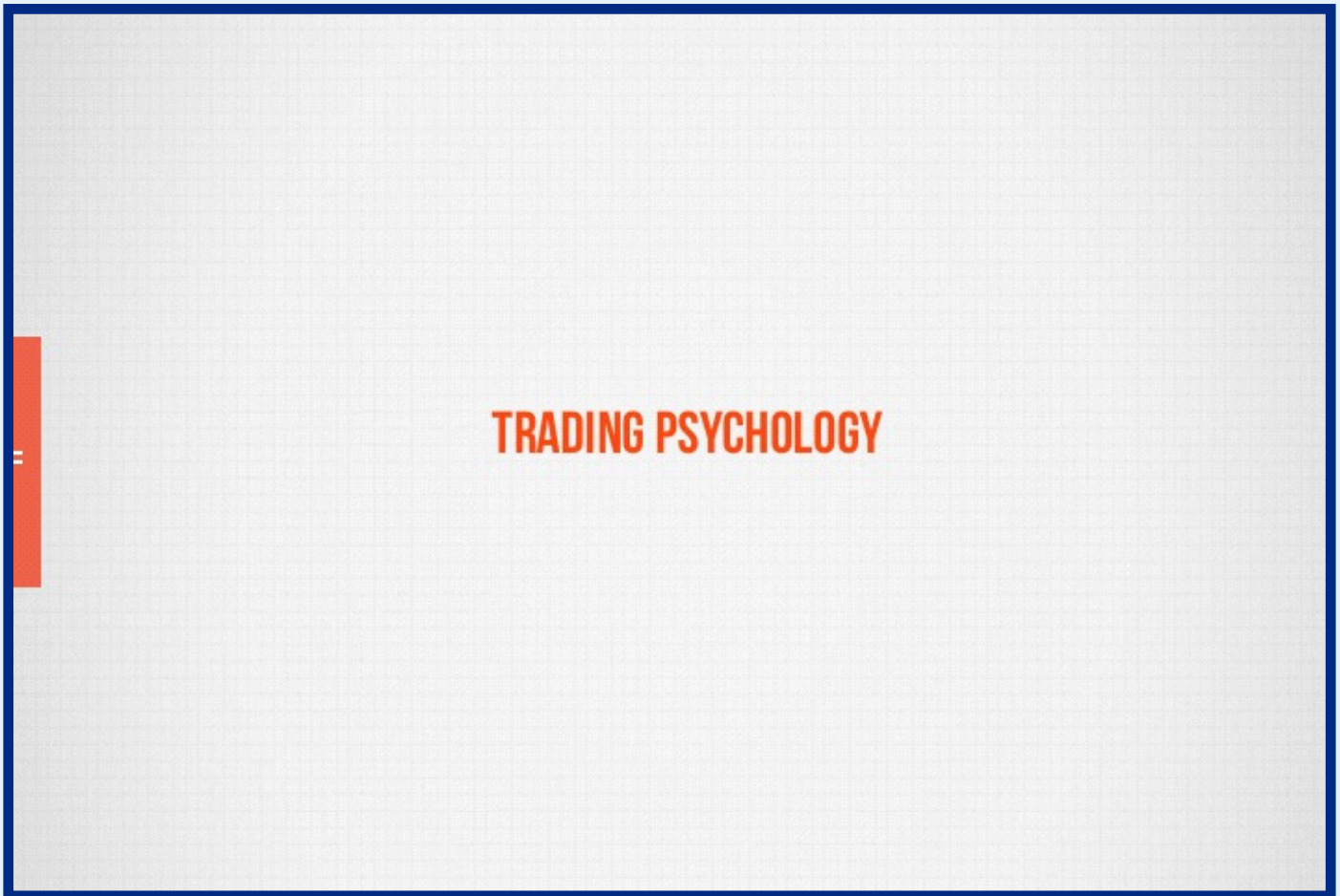
Following the approach of dynamic position sizing, it will help you reduce your account volatility and potentially help you improve account growth.

Taking your trading to the next level is usually very straight-forward because conventional trading wisdom solely focuses on blinking indicators and too-good-to-be-true trading strategies, whereas the things that could really make a difference are left out.

Money and risk management is a very 'unsexy' area in the world of traders and it's only after months of losing money and endless frustrations that traders start focusing on this aspect of trading. You can usually shorten your learning curve, by being more mindful about risk management and it does not take that much.

# CHAPTER 9

## Trading Psychology



The field of active trading is a challenging, fast-paced environment with nearly infinite possibilities and pitfalls. The odds are seemingly stacked against active traders in the marketplace, with studies suggesting that more than 80% consistently lose money and only 1% achieves predictable, long-term profitability.

With four out of five traders showing regular losses, it's a wonder if anyone is willing to pursue a career in the trading industry. After all, it's not typical for an individual to invest time and money into a business that has an 80% chance of failing. So, why the attraction of making active trading as a profession? The answer lies in the benefits which success in the marketplace can provide to prosperous traders.

## WHAT IS IT?

- Trading psychology refers to the aspects of an individual's mental makeup that help determine whether he will be successful in trading currencies for a profit.
- It is as important as other attributes such as knowledge, experience and skill in determining trading success.
- Discipline and risk-taking are two of the most critical aspects of trading psychology.
- While fear and greed are the two most commonly known emotions associated with trading psychology, other emotions that drive trading behavior are hope and regret.

Trading psychology refers to the aspects of an individual's mental makeup that help determine whether he or she will be successful in buying and selling securities for a profit. Trading psychology is as important as other attributes such as knowledge, experience and skill in determining trading success.

Discipline and risk-taking are two of the most critical aspects of trading psychology, since a trader's implementation of these aspects is critical to the success of his or her trading plan. While fear and greed are the two most commonly known emotions associated with trading psychology, other emotions that drive trading behavior are hope and regret.

Why is trading psychology so important?

It is because human beings are not wired to trade. Our brains are constructed to perpetuate survival, not make money. That is why so many traders know exactly how to make money, but still do the exact opposite.

Thousands of years ago, surviving in the state of nature did not require long term thinking, assessing probabilities, managing risk or handling draw downs. Instead, it required immediate action.

## QUESTIONS TO ASK?

- For every trade, you must ask yourself these questions:
  - Does this fit into my trading personality and my risk tolerance?
  - What strategy will this fit into?
  - If this trade goes the wrong way, where is my stop?
  - How much money am I risking in the trade, and what is the reward potential?

Let's discuss some of the questions that you must ask before making any trade.

Does this fit into my trading personality and my risk tolerance?

What strategy will this fit into?

If this trade goes the wrong way, where is my stop?

How much money am I risking in the trade, and what is the reward potential?

This is what many traders find difficult. All of these decisions, the very process of ensuring these decisions fit into your risk tolerance and your strategy parameters, are a tough multitasking call.

The following steps are of utmost importance: you must take time to prepare, work hard, plan your trades, and take time afterwards to review your trades.

## SUCCESSFUL TRAITS

- Successful traders have some common psychological traits that contribute to their success. These traits include –
  - Know your limits and do not over trade.
  - Risk management is the key to preserving trading capital and attaining trading success.
  - Never “**HODL**” for long
  - Maintain trading discipline at all times.
  - Know the difference between not fighting the trend and following the herd.

Successful traders have some common psychological traits that contribute to their success. Successful traders are those who trade for skill and not for the money. Almost all professional traders hide their unrealized profit and loss (P& L) column while they are in a trade. They have no interest in seeing how much they are up or down. They focus on the perfect execution of a profit target or a stop loss level. Consistently profitable traders take every negative or positive trade they make as an opportunity to improve themselves.

You may be surprised to read this, but your state of alertness, your energy level, and your overall health have a significant impact on your daily trading results. Fatigue, physical tension, and ill health will often affect your concentration and adversely affect your sound decision making process.

Some of the useful traits include: Knowing your limits which will help you avoid overtrading and risk management which is the key to preserve trading capital and attain trading success.

Never “**HOLD**” for long that could always be a risk and it’s better to avoid such risks.

Maintain trading discipline at all times. Every morning, you should scan the market, find the opportunities, and sometimes in a matter of seconds make decisions on whether you should buy or sell or sell short the stock in play, and you need to make that call with a high degree of discipline.

Always know the difference between not fighting the trend and following the herd.

## WHAT TO DO?

- Take some time to identify your own trading psychology weaknesses.
- Embrace Small Losses
- Fight Fear By Reducing Risk
- Beware of “**Pump and Dump**”
- Fight Greed By Partial Profit Taking
- Review your equity curve
- Have a **Big margin for error**
- Try to eat the body, don't run after tail and head
- Develop a winning attitude
- Develop trading rules
- Building a trading plan, do research and get experience.

Carefully look at these points and follow:

Take some time to identify your own trading psychology weaknesses and work upon them. Embrace small losses and quickly forget them, take a walk to release your stress and do not restart trading until you are once again focused and calm.

Fight fear by reducing risk and follow risk management rules.

Beware of “pump and dump”, it is very challenging to identify it and you should always avoid investing during pump and dump.

Greed turned a winning trade into a loser. Fix this trading psychology leak by taking partial profits. Greed impacts traders by making targets too aggressive and illogical.

Review your equity curve as spending a lot of time analyzing winning and losing trades help in creating some sort of insight to help crack the code or the pattern.

Have a big margin for error to avoid the risks of the highly volatile market.

Try to eat the body, don't run after tail and head. Nobody is so perfect to bet at the top and the bottom points of the wick. So always try to fill your pockets at the profitable margins.

Don't run for the peaks.

Develop a winning attitude without this you can't make profit. Have confidence in yourself and act accordingly.

Develop trading rules and be disciplined, as they are the key to succeed in the market.

Build a trading plan, do research, get experience and become a successful trader.

## WHAT TO AVOID?

- Greed
- **FOMO** (Fear of missing out)
- Fear
- Regret
- Random tips
- **Catching falling knives**
- Assuming yourself **Buddha of wall street**
- Analysis paralysis
- Battling alone
- Going all in

Let's discuss what to avoid.

As we have already discussed that greed is so harmful for the business, so avoid it by partial profit taking and reducing position size.

Fomo (fear of missing out): The force is strong with FOMO and neither you nor anyone else is immune to it. No matter how good you get, you'll regularly and repeatedly shoot yourself in the foot. So don't get swept away with this fear.

Avoid fear and regret which are simply natural reactions that are perceived as a threat. It may avoid certain losses, but it will also cause missing out on the gains.

The one thing the internet provides is a plethora of market analysis and opinions. There are literally hundreds of sites that will tell you what the market is going to do next. So with all these variety of market opinions available just avoid the random tips.

The meaning of "catching a falling knife," is obvious, it is an investor or trader's belief that he can catch a point where market will turn. This popular traders' phrase describes the attempt to make up the losses on an equity you hold, that has quickly lost a significant portion of its value by attempting to buy it at or near its low point, then holding on as it rises again, finally making up your losses.

A brief interpretation would be "If the market is falling, don't assume you know when to buy back in; if the market is rising, don't assume you know when to sell to catch the maximum profits."

Assuming yourself as a Buddha of Wall Street just by winning some trades is a very big mistake.


Never do that. Learning is the most important thing in trading and the more you learn the better you will be. You will never become invincible.

Avoid analysis paralysis.

Battling alone will also not help your cause; you cannot succeed on your own. There is so much value in sharing ideas and learning from a community of traders and, should you have one, your mentor.

Trading is not poker. Don't go all in. If you start pushing your entire stack of money into a few coins again and again you're playing with fire. Be happy with smaller gains. Don't risk everything and you won't lose everything at once. Start small, grow big.

Avoid all these and you will be in the road to success without facing many hiccups in between.



## PUMP & DUMP

- Cryptocurrency is a prime target for pump and dump scams. It's an easy way to get rich fast by inflating the price for those with buying power.
- A pump and dump scheme is the process where you buy an asset in an effort to dump the asset at a higher valuation, you promote it to new, unsuspecting investors.
- The promoter of the asset is left with a profit. On the other hand, those people who were tricked into purchasing the asset by the promoter are left holding the bag.
- There are two groups of people that are involved in pump and dump scams: The players, and the Innocent Newbies.
- Monitor the exchanges for avoiding such scams and some websites also let you know which Cryptocurrency is using it to make profit.

This is all about trading psychologies. And now let's learn about pump and dump.

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# CHAPTER 10

## How to Buy Cryptocurrency?



HOW TO BUY CRYPTOCURRENCY?

Now we will discuss how, or from where you can buy Cryptocurrencies. It's very easy once you get familiar with the exchanges and their policies. Be careful in choosing exchanges because your profit and losses depend a lot on the exchanges and the tools that you choose.

Note that, we do not promote any of the exchanges or Cryptocurrencies in this book. So, do your own research and pick wisely!



## THINGS REQUIRED

- If you want to trade cryptocurrency you need:
  - A cryptocurrency wallet (or two)
  - A cryptocurrency exchange (or two) to trade on.
- From there it is as simple as filling out a form and waiting for the transaction to process (once your information is verified with the exchange you pick).

If you want to start trading Cryptocurrency then the very first thing you will need is a cryptocurrency wallet (or two). And the second is a cryptocurrency exchange (or two) through which you would trade on.

From there it is as simple as filling out a form and waiting for the transaction to process, only after your information or the KYC details are verified with the exchange you pick. It is as simple as that.

## THINGS TO KNOW

- If you are serious about trading cryptocurrency you'll need a reputable exchange like **Bittrex, Binance, GDAX, or Kraken** and a secure wallet to store your coins in
- You can compare exchanges, check for reputation among users and can also check out reviews from websites like **Cryptocompare** before going on with a particular exchange.
- A beginner should start by trading prominent coins, so in 2018 that is coins like Bitcoin and Ethereum but in the near future this could change.
- A cryptocurrency exchange is not part of the regular stock exchange.
- The cryptocurrency market is insanely volatile here in 2018.
- You can trade and invest in it or you can use it for transactions where it is accepted.
- Do not do **"Margin Trading"** unless you know exactly what that is. Cryptocurrency is volatile and you can end up losing all your money in an instant if you aren't careful.
- If you don't understand tax implications of trading cryptocurrency tread very carefully.

There are only a few things to know about trading Cryptocurrency beyond what was noted above. Below are a few of the most important things to know before getting started:

If you are serious about trading Cryptocurrency you'll need a reputable exchange like Bittrex, Binance, GDAX, or Kraken and a secure wallet to store your coins in.

Are you looking for a specific Cryptocurrency? You can find on Coin Market Cap on which exchanges it is listed under the 'Markets' tab.

You can compare exchanges, check for reputation among users and can also check out reviews from websites like Cryptocompare before going on with a particular exchange.

A beginner should start by trading prominent coins. In 2018, coins like Bitcoin and Ethereum are prominent, but in the near future this could change. Beware with the fact that a cryptocurrency exchange is not part of the regular stock exchange and is very different from it. You have to work according to the crypto trading rules and you should also be aware of the volatility of the Cryptocurrencies. It is because cryptocurrency market is insanely volatile here in 2018, and it will be more and more volatile as the time passes.

Cryptocurrencies have its own purpose, many are used just for trading and many have particular utility. So analyze properly and then decide which coins you can trade and invest in, and which coin or token you can use for transactions or payments.

One more important thing you should note that Margin trading is a very risky business, so don't try it when you are a beginner and only play with this trading technique when you become smart enough to understand what it is and how you can make profit from it. Cryptocurrency is volatile and you can end up losing all your money in an instant if you are not careful.

If you don't understand the tax implications of trading Cryptocurrency, trade very carefully. There are some really nasty traps to fall into when trading coins because they aren't necessarily considered "like-kind assets." If that is confusing, then consider sticking with trading USD for coins until you grasp the concept.



## TRADE TRACKING

- One will probably need an app to track cryptocurrency prices. These apps are not for storing or trading currency. They are just to check the markets. So here are few apps that might work for you:
  - Coin Market Cap: general coin price tracking website
  - Blockfolio: A simple app that allows you to add a watchlist and add trades so you can track your portfolio. The most useful thing about this app is that it displays all currencies on your watchlist in the currency of your choice.
  - Coincap: This app allows you to display currencies by market capitalization, volume and other ranking factors.
  - Coinigy: This is the best trading platform with all the major exchanges and the best trading tools.

Tracking trades, it is an important step before you make any trade.

And for this we will need an application or a website to start tracking Cryptocurrency prices. These apps are not for storing or trading currency. They are just to check the markets. So here are few apps that might work for you.

First is “Coinmarketcap” which is a simple website for tracking all the Cryptocurrencies. It will provide you all the technical parameters for analysis like market cap, price, circulating supply and the percentage change of the last 24hrs. It also provides you with some tools for making a market analysis. Blockfolio is a simple app that allows you to add a watch list and add trades so you can track your portfolio. The most useful thing about this app is that it displays all currencies on your watch list in the currency of your choice.

Coincap is an app that allows you to view currencies by market capitalization, volume, and other ranking factors. Coinigy, it is the best trading platform with all the major exchanges and the best trading tools.

So now it's up to you what suits your needs and how comfortable you are, so choose accordingly.

## WHERE TO BUY?

- If you are looking for a specific cryptocurrency, you can find on “Coin Market Cap” on which exchanges it is listed under the ‘Markets’ tab.
- If it’s listed on multiple exchanges, that’s great, it means it’s in good demand. But it’ll make your choice harder.
- **Trading platforms and Exchanges:**
  - Kraken
  - Coinbase
  - Bitstamp
  - Binance etc.
- **P2P exchanges:**
  - Local Bitcoins
  - Zebpay
  - Etherdelta etc.

Now the question is - which one is for you? Are you happy with the fixed price of a trading exchange? That’s the easiest way to buy and sell the coins with the highest demand, like Bitcoin, Ethereum, or Litecoin.

Next question that you encounter is how can you differentiate between exchanges?

Geographical restrictions, payment method and fees are some parameters you should consider.

You can also visit [Bitcoin.org](https://bitcoin.org) to check country-wise listing of exchanges.

If it’s listed on multiple exchanges, that’s great, it means it is in good demand. But it’ll make your choice harder.

We have already discussed about the exchanges, some are Kraken, Coinbase, Bitstamp, and Binance etc.

P2P exchanges are also used for trading or buying Cryptocurrencies, some of these exchanges are Local Bitcoins, Zebpay, and Etherdelta etc.

Now make some research on your own and choose accordingly.

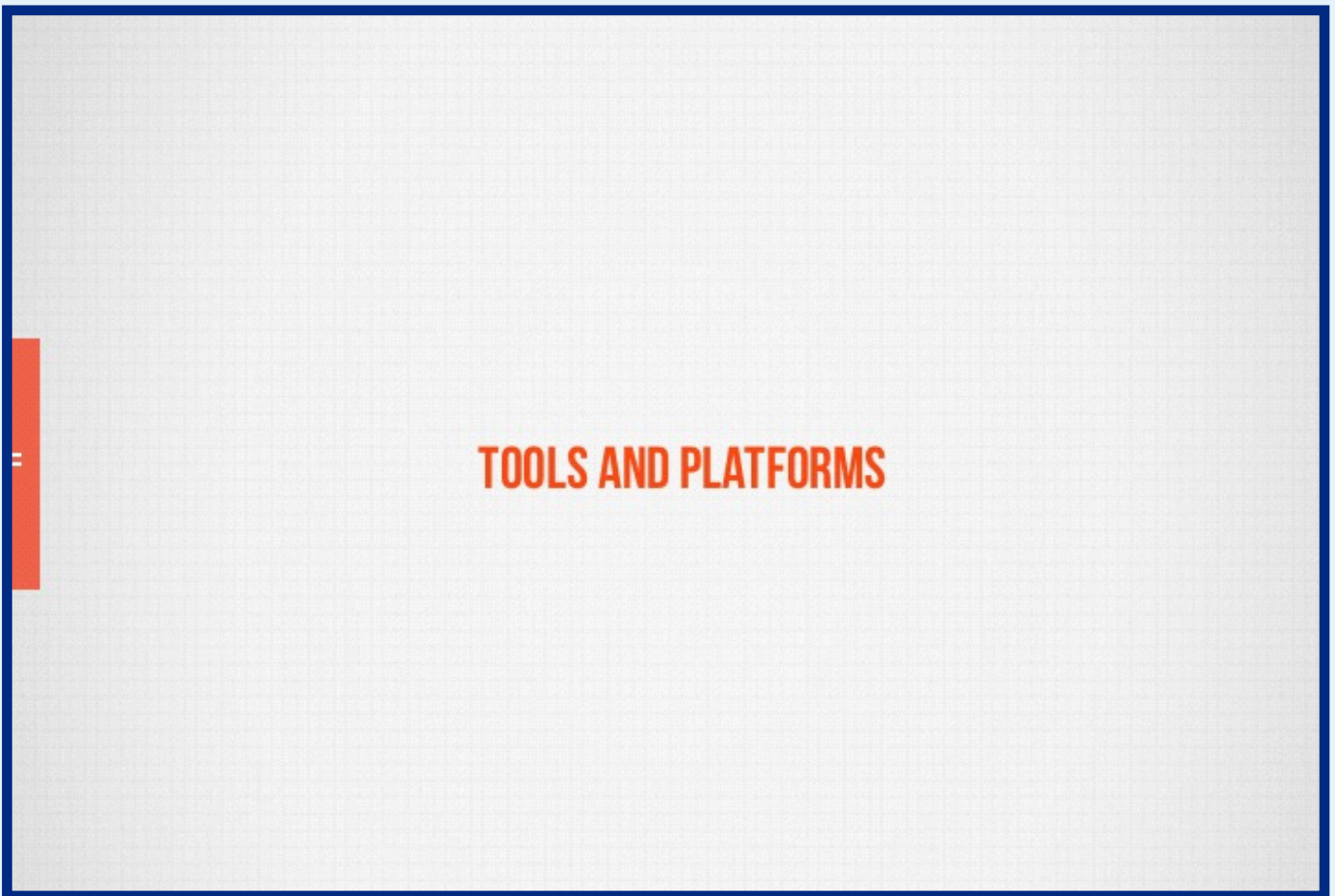
And probably the most important tip before you starts. Don’t trade with money that you can’t afford to lose!

Beginners are ready to do dumb things, like investment of the whole savings. And the dumbest one is borrowing money from family and friends and investing that into Bitcoin, Litecoin, ripple etc. Always consider the option that you could lose everything if you don’t know what you are doing.

Happy investing!

# CHAPTER 11

## Tools and Platforms



Let's see what all tools and platforms you can use while trading. What are all those side tools that make market analysis easier and simpler?

We will also show you how you can place market orders on Bittrex.

An important thing to note is that we are not promoting any platform or tool here. It's completely up to you, you can choose whatever platform or tool you want to use.

## TRADING PLATFORMS

- Some of the popular trading platforms that are used to trade Cryptocurrencies and tokens are:
  - Bittrex
  - Bitfinex
  - Coinigy
  - Poloniex
  - Kraken
  - GDAX
  - Gemini
  - HitBTC
  - Cryptopia
  - Binance etc.

The most important thing you will need for trading is a trading platform that is used for making currency exchanges between traders. Some of the popular trading platforms that are used to trade Cryptocurrencies and tokens are: Bittrex, Bitfinex, Coinigy, Poloniex, Kraken, GDAX, HitBTC, Cryptopia etc.

For the purpose of this book we will use Bittrex as a trading platform for discussing things in a practical manner and it's totally your discretion whether to use it or not.

## REAL TIME MARKET DATA

- Although all the trading platforms shows real time market analysis but there are some websites and apps that are used only for real time market analysis.
- Some of websites are:
  - **coinmarketcap.com**
  - **coincap.io**
  - **cryptowat.ch**
  - **coinranking.com**
- Some of apps are:
  - **Blockfolio**
  - **Delta**
  - **Bitcoin Checker**
  - **zTrader**

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Some of the websites are: [coinmarketcap.com](https://coinmarketcap.com), [coincap.io](https://coincap.io), [cryptowat.ch](https://cryptowat.ch), and [coinranking.com](https://coinranking.com)

Some of the apps that let you gather all the required market parameters are: Blockfolio, Delta, Bitcoin Checker, and zTrader.

## BUY AND SELL ORDERS

- Three types of buying and selling orders that are used in trading are Market orders, Limit orders and Marketable Limit order.
- **Market order:**
  - A market order is the most basic type of trade order. It's an order to buy or sell at the best available current price.
  - As long as there is adequate liquidity, this type of order is executed immediately.
  - If you absolutely need to get in or out of a trade, a market order is your best bet.
  - Typically, a market order to buy is filled at the ask price, and a market order to sell is filled at the bid price.
  - A market order does not guarantee price – it only guarantees a fill.

The three types of buying and selling orders used in trading are Market orders, Limit orders and Marketable Limit order.

A market order is the most basic type of trade order. It's an order to buy or sell at the best available current price. Most order entry interfaces – including trading apps – have handy “buy” and “sell” buttons to make these orders quick and easy. As long as there is adequate liquidity, this type of order is executed immediately.

The primary advantage to using a market order is that you're guaranteed to get the trade filled. If you absolutely need to get in or out of a trade, a market order is your best bet. The downside, however, is that market orders don't guarantee price or allow for any precision in order entry, which can lead to costly slippage. You can limit losses from slippage by using market orders only on instruments that trade with good liquidity.

Typically, a market order to buy is filled at the ask price, and a market order to sell is filled at the bid price. Keep in mind that the last-traded price isn't automatically the price at which a market order will be executed. This is especially true in fast-moving or thinly traded markets.

We will now show you how you can place a market order on Bittrex.

# BUY AND SELL ORDERS

- **Limit Order :**
  - A **limit order** is an order to buy at no more than a specific price, or to sell at no less than a specific price (called "or better" for either direction).
  - A limit order offers the advantage of being assured the market entry or exit point is at least as good as the specified price.
  - Limit orders are designed to give investors more control over the buying and selling prices of their trades.
  - A limit order may sometimes receive a partial fill or no fill at all due to its price restriction.

Next is limit order.

A limit order is an order to buy or sell at a specified price or better. A buy limit order (a limit order to buy) is executed at the specified limit price or lower (i.e., better). Conversely, a sell limit order (a limit order to sell) is executed at the specified limit price or higher (again, better).

Unlike a market order, where you simply press "buy" and let the market choose the price, you have to specify a price when using a limit order.

While a limit order prevents negative slippage, it doesn't guarantee a fill – it will only be filled if price reaches the specified limit price. You could miss a trading opportunity if price moves away from the limit price before your order can be filled – the market can move to the limit price and the order still may not get filled if there are not enough buyers or sellers (depending on the trade direction) at that particular price level.

Traders use limit orders to improve price and to take advantage of pullbacks in price.

Now let's see how to place a limit order.

## BUY AND SELL ORDERS

- **Marketable Limit Order:** Any order other than a limit order which is executed only when a specific condition is satisfied.
  - Stop orders
    - Stop limit order
    - Stop loss order
  - Time in force orders
    - Good-till-canceled (GTC)
    - Immediate or Cancel (IOC)
    - Fill or Kill (FOC)

And the third type is Marketable limit orders.

These are of two types: Time in force or the conditional orders and the second one is stop orders.

Conditional orders are advanced trade orders that are automatically submitted or canceled if specified criteria are met. Conditional orders must be placed before the trade is entered, and are considered the most basic form of trade automation. Use a conditional order to place orders that will be submitted or canceled only if specified criteria are met.

These are three ways for placing conditional orders.

Good 'Till Canceled (GTC) - This order will be placed on the order book and remain valid until you cancel it.

Immediate or Cancel (IOC) - This order will be placed and if it is not immediately filled, it will automatically be cancelled and removed from the order book.

Fill or Kill (FOC) - This order will only complete if the entire amount can be matched. Partial matches are not filled with this order type and will not execute.

Select 'stop' above the buy/sell buttons to place a stop order.

To place a stop market order, specify the amount and price at which the order should be triggered. Note that Stop Market orders are executed as market orders and may incur slippage.

To place a stop limit order, specify the amount and price at which the order should be triggered and also click "advanced" to specify the limit price. A stop limit order will automatically post a limit order at the limit price when the stop price is triggered.

Let's see what all you do with conditional and stop orders.

## WATCHLIST

- A Watchlist is used to specify coins or tokens where irregularities are present, or where the potential for insider trading or other corruption exists.
- It can be considered as a surveillance tool used to identify risks in the market.
- Many trading platforms give investors and traders the opportunity to create Watchlist and screen, or filter, for certain conditions to be met.
- The watch list may provide an alert, such as an audible alert, text message or email, that warns the user that conditions are about to be met or have been met.
- Some Crypto Watchlists are:
  - **Worldcoinindex**
  - **Barchart**
  - **EveningStar**

Watchlists and scanners are some tools that are used for analyzing markets.

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Some Crypto Watchlists are: Worldcoinindex, Barchart and EveningStar

## SCANNERS

- Cryptocurrency scanner provides traders with instant cryptocurrency scanning based on specific filters and alerts.
- Based on hundreds of built-in filters and alerts, it is used to define events, such as price changes, percentage increases and decreases, volume changes, and formulation of technical analysis or fundamental analysis indicators.
- The resulting time advantage will allow the trader to enter into a transaction before a critical traffic is generated on a given cryptocurrency.
- Some of the available Crypto market scanners are:
  - **Cryptomarketscanner by Steemit**
  - **Coindera**
  - **Algory**

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Some of the available Crypto market scanners are: Cryptomarketscanner by Steemit, Coindera, and Algory.

## COMMUNITY OF TRADERS

- Trading alone is very difficult and can be emotionally overwhelming.
- Online trading rooms are excellent places for meeting like-minded traders, and they can be powerful learning tools.
- It also helps in absorbing the knowledge of mentors and experienced traders like a sponge; this helps establishing the right trading behaviors faster and more effectively.
- When you share your trading results and your ups and downs with fellow professionals, you turn social interaction into social learning.
- Chat room members may catch a few trends together, but they will also get killed together when trends reverse.
- Never forget that successful traders are independent thinkers. Simply use your judgment to decide when to trade and when to not.
- **Whalepool, The CHT Community, Bitcoin Talk, Trading View and BitcoinMarkets etc.** are some of the Crypto trading communities.

Trading alone is very difficult and can be emotionally overwhelming. It is beneficial to join a community of traders and ask questions, talk to them if needed, learn new methods and strategies, get some hints and alerts about the stock market, and also make your own contributions.

Online trading rooms are excellent place for meeting like-minded traders, and they can be powerful learning tools. It also helps in absorbing the knowledge of mentors and experienced traders like a sponge this helps establishing the right trading behaviors faster and effectively. When you share your trading results and your ups and downs with fellow professionals, you turn social interaction into social learning.

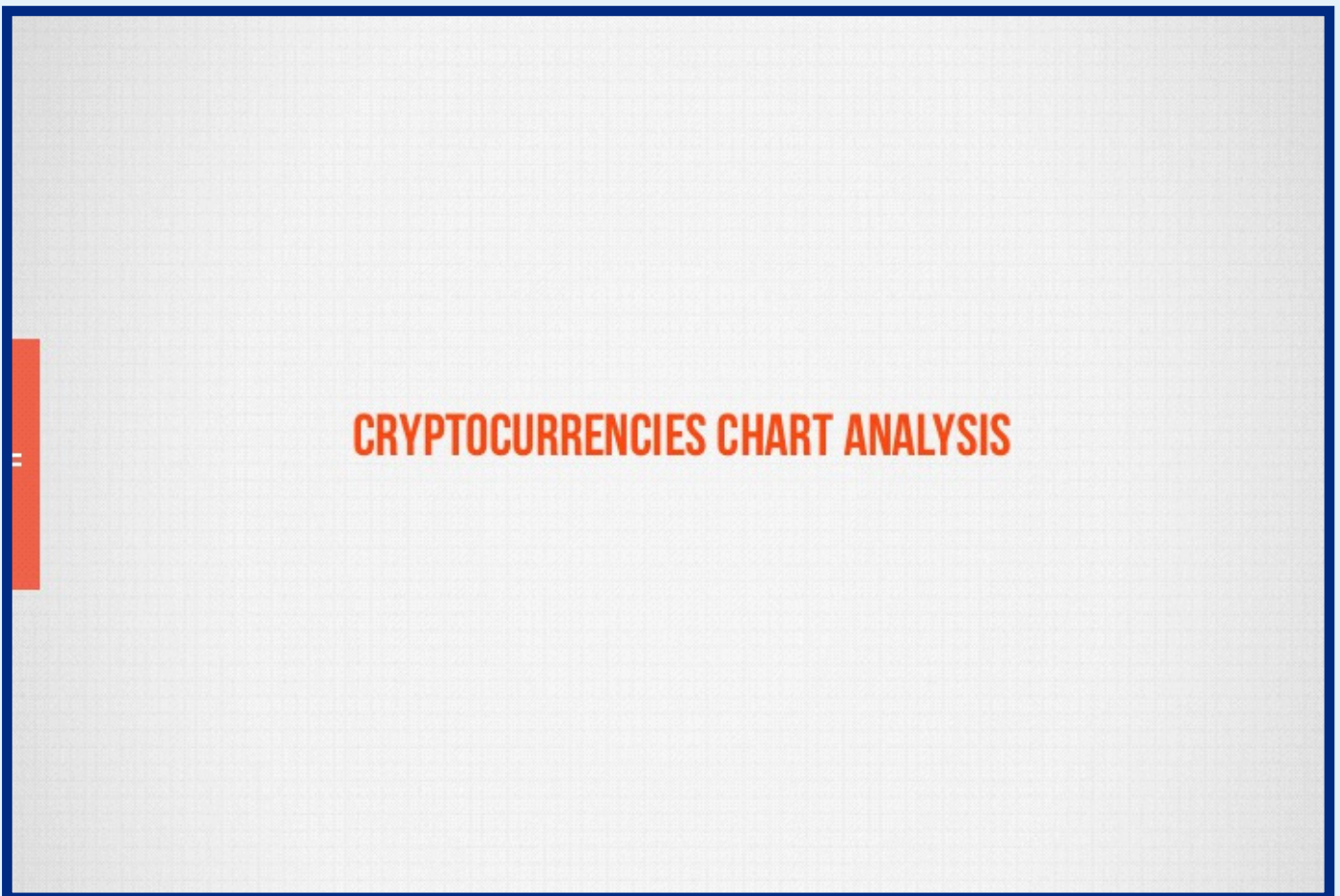
Chat room members may catch a few trends together, but they will also get killed together when trends reverse. Never forget that successful traders are independent thinkers. Simply use your judgment to decide when to trade and when not to.

Whalepool, The CHT Community, BitcoinTalk, Trading View and BitcoinMarkets etc. are some of the Crypto trading communities.

All these tools and platforms can be used for making market analysis and to develop a much better understanding about any Cryptocurrency in which you want to invest, or any token which you want to use.

# CHAPTER 12

## Cryptocurrencies Chart Analysis



Charts play the most important role while making any technical analysis in trading. For many analysts, the chart of a coin or token is the starting point for all future analysis. These are the best tools for making market analysis so it's better to have a thorough understanding of all the charts before you start trading Cryptocurrencies and tokens.

And for good reason, charts can provide a lot of information in a small amount of time.

## TECHNICAL CHARTS



- Charts are simply graphical representations of a series of prices over time.
- The common denominator is that price is typically on the Y-axis and time is usually on the X-axis.
- Traders have a number of options when it comes to which chart types to use. Candlesticks and bar charts are the most popular.
- Charts are extremely useful to identify current trends and trend reversals, and to trigger buy and sell signals.



Charts are simply graphical representations of a series of prices over time. For example, a chart might show a coin's price movement over a one day period where each point represents an individual hour's closing price. Or, a chart might show a commodity's price movement over a period of just one hour with each point representing one second or one minute. The common denominator is that the price is typically on the Y-axis and time is usually on the X-axis.

While technical analysts use charts almost exclusively, the use of charts is not limited to just technical analysis. Because charts provide an easy-to-read graphical representation of a coin's price movement over a specific period of time, they can also be of great benefit to fundamental analysts. A graphical historical record makes it easy to spot the effect of key events on a coin's price, its performance over a period of time and whether it is trading near its highs, lows, or in between.

Traders have a number of options when it comes to which chart types to use. Candlesticks and bar charts are the most popular and widely used while making technical analysis. The chart reader can determine the volatility of the company's shares by looking at the movements on the chart. A coin whose shares exhibits very jagged up-and-down movements is clearly more volatile than a coin whose shares moves relatively smoothly across time.

A single chart has the ability to display a significant amount of information. More conceptually, charts are an illustration of the struggle between buyers and sellers. Technical analysis assumes that prices discount everything, prices moves in trends, and history repeats itself. Assuming these things are true, charts can be used to formulate trading signals and can even be the only tool a trader utilizes. Charts are extremely useful to identify current trends and trend reversals, and to trigger buy and sell signals.

## CHART PROPERTIES

- There are several things that traders should be aware of when looking at a chart, since these factors can affect the information that is provided. They include the time scale, price scale, volume and market depth properties that are used in the creation of the chart.
  - **Time Scale:** The time scale refers to the range of dates that appear at the bottom of the chart, which can vary from minutes to months.
  - **Price Scale:** The price scale appears on the right side of the chart and shows the price ranges. Price scales can be either linear (arithmetic) or logarithmic in nature.
  - **Volume:** It represents the amount of units, or volume, that is being traded. These provide even more insight into market action because they represent the actual numbers that are being traded.
  - **Market Depth:** Market depth lists all buy and sell orders in the market for a particular currency. It is split into the prices that buyers and sellers are willing to buy or sell at.


There are several things that traders should be aware of when looking at a chart, since these factors can affect the information that is provided. They include the time scale, price scale, volume and market depth properties that are used in the creation of the chart.

Time scale implemented on the Y-axis of the chart refers to the range of dates that appear at the bottom of the chart, which can vary from minutes to months. Shorter timeframes are commonly used by day traders or investors looking for greater detail, although these smaller timeframes tend to have more 'noise' that can make trends harder to spot.

The price scale appears on the right side of the chart and shows the price ranges. Price scales can be either linear (arithmetic) or logarithmic in nature. The price scale measures absolute moves and doesn't show the effects of percentage changes in value over time. Logarithmic scales look at price movements in percentage terms, which mean that the spacing between each point is equal to the percentage change. Many professionals use logarithmic charts because it's easier to spot how large price movements are on a percentage basis, whereas linear charts can be a little distorted in fast moving markets.

Volume represents the amount of units, or volume that is being traded. These provide even more insight into market action because they represent the actual numbers that are being traded in the market.

Market depth lists all buy and sell orders in the market for a particular coin. If you wish to see if there is sufficient liquidity to sell a particular coin, you can quickly check how many orders exist, and at which prices.



## TYPES OF CHARTS

- **Time-based charts**
  - **Line chart:** The most basic type of chart because it represents only the closing prices over a set period.
  - **Bar chart:** They expand upon the line chart by adding the open, high, low, and close or the daily price range.
  - **Candlesticks chart:** A colored combination of line-chart and a bar-chart each bar represents all four important pieces of information for the time : the open, the close, the high and the low.

Now, let's discuss what types of charts are available in the trading market to make technical analysis. There are two types of charts: first is the time-based chart and the second is data-based chart.

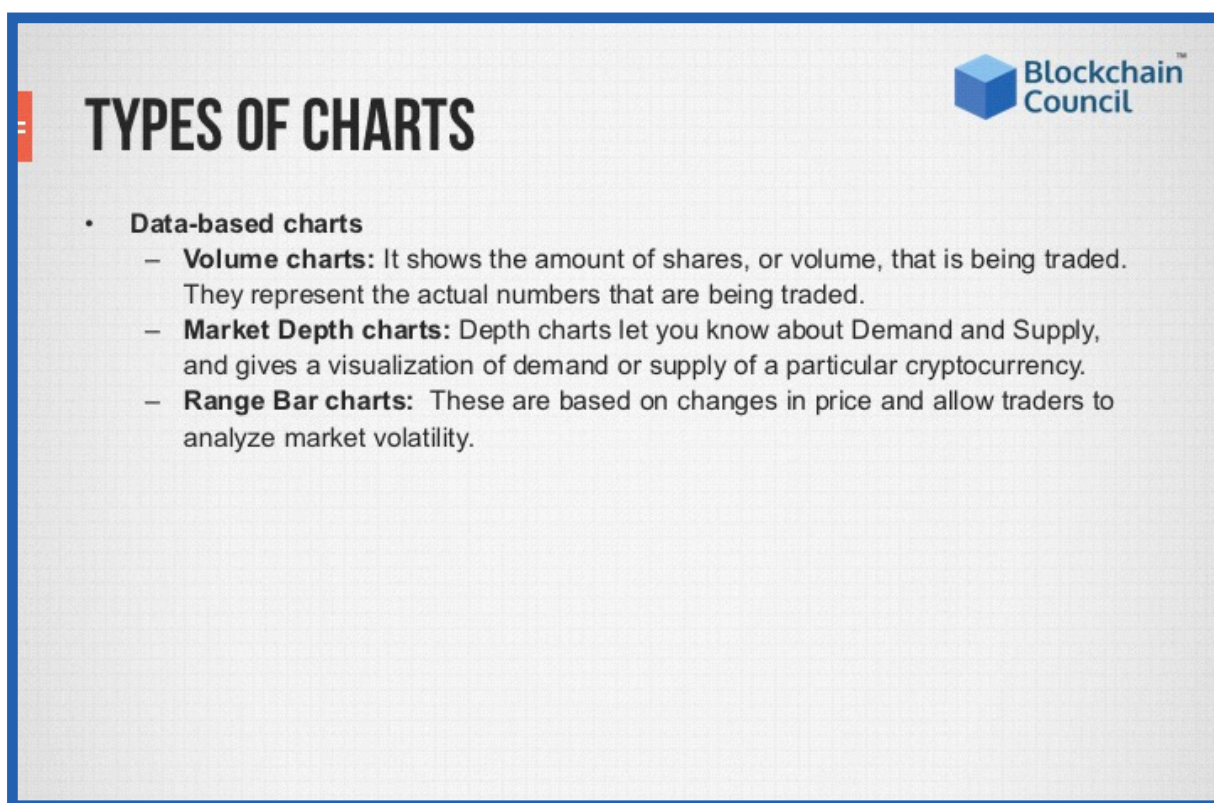
A time-based chart displays a bar every time the specified time interval ends. You can have various timeframes available to plot time-based charts. In each case, the open, high, low, and closing prices for that time period are recorded in each bar.

For example, in a chart with a 30-minute data interval, one bar on the chart represents the open, high, low, and closing prices of all the transactions that occurred within that 30-minute period. The bar displays the open, high, low and closing prices for the 30-minute period. Three types of time-based charts are line charts, bar charts and candlesticks chart. Let's discuss these charts in detail.

First is line chart, line charts are the most basic type of chart because it represents only the closing prices over a set period. The line is formed by connecting the closing prices for each period over the timeframe. While this type of chart doesn't provide much insight into intraday price movements, many investors consider the closing price to be more important than the open, high, or low price within a given period. These charts also make it easier to spot trends since there's less 'noise' happening compared to other chart types.

Next is bar chart, they expand upon the line chart by adding the open, high, low, and close – or the daily price range, in other words – to the mix. The chart is made up of a series of vertical lines that represent the price range for a given period with a horizontal dash on each side that represents the open and closing prices. The opening price is the horizontal dash on the left side of the horizontal line and the closing price is located on the right side of the line. If the opening price is lower than the closing price, the line is often shaded green to represent a rising period. The opposite is true for a falling period, which is represented by a red shade.

And, the last is candlestick chart; these charts originated in Japan over 300 years ago, but have since become extremely popular among traders and investors. Like a bar chart, candlestick charts have a thin vertical line showing the price range for a given period that's shaded different colors based on whether the stock ended higher or lower. The difference is a wider bar or rectangle that represents the difference between the opening and closing prices. Falling periods will typically have a red candlestick body, while rising periods will have a green candlestick body. Days where the open and closing prices are the same will not have any wide body or rectangle at all. These are most widely used charts in the trading community and so we will discuss these charts in a detailed manner.



**TYPES OF CHARTS**

Blockchain Council

- **Data-based charts**
  - **Volume charts:** It shows the amount of shares, or volume, that is being traded. They represent the actual numbers that are being traded.
  - **Market Depth charts:** Depth charts let you know about Demand and Supply, and gives a visualization of demand or supply of a particular cryptocurrency.
  - **Range Bar charts:** These are based on changes in price and allow traders to analyze market volatility.

Next is data-based chart that allow traders to view price action from various data intervals instead of just time. Market depth, volume and range bar charts are examples of data based chart intervals. These charts print a bar at the close of a specified data interval, regardless of how much time has passed. Depth charts let you know about demand and supply. Volume charts indicate when a certain number of shares or contracts have traded. Range bar charts represent when a certain amount of price movement has occurred. Let's take a closer look at these data-based chart intervals and how we can use them to our advantage.

Volume charts are based solely on the amount of shares, or volume that is being traded. These bars may provide even more insight into market action because they represent the actual numbers that are being traded. We can get an idea of how fast a market is moving simply by noting how many (and how quickly) bars are printing. In a 1,000-volume chart, for example, one bar will print after every 1,000 shares have traded, regardless of the size of the transaction. In other words, one bar might comprise several smaller transactions or one larger transaction. Either way, a new bar begins to print as soon as 1,000 shares have traded.

Market depth chart is one of those which can let you know about demand and supply. It gives a visualization of demand or supply of a cryptocurrency. A depth chart for a bid/ask market has two lines, one for BIDs (BUY orders) and one for ASKS (SELL orders).

Range Bar charts are based on changes in price and allow traders to analyze market volatility. A benefit of using range bar charts is that during periods of consolidation, fewer bars will print, thus eliminating some of the market noise encountered with other types of charting. Because fewer bars deliver the same price information, traders may be able to pinpoint trade entries with more precision.

Traders may find it helpful to experiment with different data types and intervals to find the combination that best suits their trading method. These different types of charting provide a unique method of viewing the market that cannot be seen through time-based charting techniques.

Even though many different charting techniques are available, one method is not necessarily better than the other. The data may be the same, but each method will provide its own unique interpretation, with its own benefits and drawbacks. When all is said and done, it is the analysis of the price action that separates successful technicians from not-so-successful technicians.

And note that the keys for successful chart analysis are dedication, focus, and consistency. Learn the basics of chart analysis, apply your knowledge on a regular basis, and continue your development. Limit the number of charts, indicators and methods you use. Learn how to use them, and how to use them well. Maintain your charts on a regular basis and study them often.

# CHAPTER 13

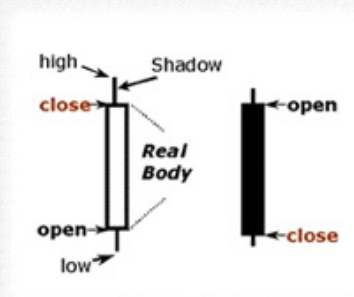
## Candlestick Chart



So we have covered chart analysis and have discussed about candlestick chart. So let's explore it and discover how you can work your way out with these charts.

# INTRODUCTION

- Candlestick patterns are a form of technical analysis and charting used for market analysis.
- They can be used in all time frames, from those looking for long term investments to those who use swing trading or day trading.
- The power of candlesticks is that they excel at giving market turning points and when used properly can potentially decrease market risk exposure.
- Candlestick charts are a type of financial chart for tracking the movement of securities.
- They are easy to understand and furnish unique market insights



Candlestick patterns and charting are used in market analysis. They can be used in all time frames, from those looking for long-term investments to those who use swing trading or day trading. The power of candlesticks is that they excel at giving market turning points and when used properly, it can potentially decrease market risk exposure.

Candlestick charts are a type of financial chart for tracking the movement of securities. They are easy to understand and furnish unique market insights. To create a candlestick chart, you must have a data set that contains open, high, low and close values for each period you want to display.

The hollow or filled portion of the candlestick is called "the body." The long thin lines above and below the body represent the high/low range and are called "shadows" also referred to as "wicks" and "tails." The high is marked by the top of the upper shadow and the low by the bottom of the lower shadow.

If the cryptocurrency closes higher than its opening price, a hollow candlestick is drawn with the bottom of the body, representing the opening price, and the top of the body representing the closing price. If the cryptocurrency closes lower than its opening price, a filled candlestick is drawn with the top of the body representing the opening price, and the bottom of the body representing the closing price.


Compared to traditional bar charts, many traders consider candlestick charts more visually appealing and easier to interpret. Each candlestick provides an easy-to-decipher picture of price action. Immediately a trader can compare the relationship between the open and close as well as the high and low.

The relationship between the open and close is considered as vital information and forms the essence of candlesticks. Hollow candlesticks, where the close is greater than the open, indicate buying pressure.

Filled candlesticks, where the close is less than the open, indicate selling pressure. Generally, the longer the body of the candle, the more intense is the trading. A hollow body signifies that the stock closed higher than its opening value. A filled body signifies the opposite.

The best way to explain is by using a picture, so here is a picture which will give an idea how to use candlesticks.

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## HOW TO READ?

- Timeframe is the width of each candlestick(preferably 1hr timeframe but it totally depends on the situation)
- The color of the central rectangle(candle) tells investors whether the opening price or the closing price was higher
  - A red or filled candlestick means the closing price for the period was less than the opening price; hence, it is bearish and indicates selling pressure.
  - Meanwhile, a green or hollow candlestick means that the closing price was greater than the opening price. This is bullish and shows buying pressure.
- The lines at both ends of a candlestick are called shadows(wick), and they show the entire range of price fluctuations from low to high. The upper shadow shows the stock's highest price for the day and the lower shadow shows the lowest price for the day.
- Red flat candle shows someone sold but price never fluctuates
- Flat green shows someone bought but price never fluctuates

Now, let's have a look at how you will read candlestick chart for your benefit.

The patterns and formations of candlesticks can provide a lot of information on where to buy and sell Cryptocurrencies, as well as when to exit these positions. The first thing is that you must choose a particular timeframe to check the pattern accordingly. Timeframe decides the width of the candlesticks and you can set it according to the strategy used in the analysis. One hour timeframe is preferably used for day trading, but it depends on the situation.

Candlestick price charts contain a lot of useful information for a skilled trader's eyes, such as whether a candle's spread is wide or narrow (illustrates the difference between high and low prices), where the closing price is relative to the high and low, etc. Together with the patterns that groups of candlesticks form, this is what traders base their trend biases on: bullish (rising prices), bearish (falling prices) or ranging sideways.

The color of the central rectangle (candle) tells investors whether the opening price or the closing price was higher, a red or filled candlestick means the closing price for the period was less than the opening price; hence, it is bearish and indicates selling pressure. Meanwhile, a green or hollow candlestick means that the closing price was greater than the opening price.


This is bullish and shows buying pressure.

The lines at both ends of a candlestick are called shadows (wick), and they show the entire range of price fluctuations from low to high. The upper shadow shows the currency's highest price for the day and the lower shadow shows the lowest price for the day. In the chart analysis, a flat red candle shows someone sold the currency, but price never fluctuates, while a flat green candle shows that someone bought the currency, but price never fluctuates.

Candlestick signal recognition will give you a trading edge like no other. What's more is that they can be used alongside any other indicator, on any time frame, and with any trading instrument. The best part is that unlike many other types of technical analysis, candlestick patterns do not require knowing fancy formulas, whatsoever.

Once you've become acclimated, the patterns are quite easy to recognize, and trades will start to 'jump out' at you. Some famous bullish and bearish candlestick signals are The Bullish Harami, The Bearish Harami, The Hammer, Inverted Hammer and Hanging Man Signals, The Morning Star and Evening Star Signals, The Dark Cloud Cover and Piercing Patterns, The Bullish and Bearish Kicker Signals, The Bullish Engulfing Signals and Bearish Engulfing Signals and the Shooting Star Signal.

So let's see what all these patterns are in the upcoming slides.




## WHAT THEY DON'T TELL?

- Candlesticks do not reflect the sequence of events between the open and close, only the relationship between the open and the close.
- The high and the low are obvious and indisputable, but candlesticks cannot tell us which came first.

Have a look at some of the details that can't be predicted by candlesticks pattern.

Candlesticks do not reflect the sequence of events between the open and close, but only the relationship between the open and the close. The high and the low are obvious and indisputable, but candlesticks cannot tell us which came first.

With a long white candlestick, the assumption is that prices advance most of the session. However, based on the high/low sequence, the session could have been more volatile. Candlesticks still offer valuable information on the relative positions of the open, high, low and close. However, the trading activity that forms a particular candlestick can vary.

	
<h2>TYPES OF PATTERNS</h2>	
Number of Bars	Candlestick patterns
Single	Spinning Tops, Dojis, Marubozu, Hammer & Hanging Man, Inverted Hammer & Shooting Star
Double	Bullish and Bearish Engulfing, Tweezer Tops and Bottoms
Triple	Morning and Evening Stars, Three Black Crows & White Soldiers, Three Inside Up and Down

There are various patterns formed by these candlesticks and analyzing them skillfully is an art in itself. Many traders regularly follow these patterns, so these patterns predict market in a precise manner.

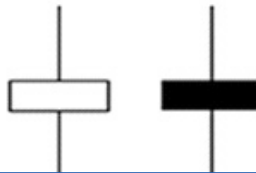
The patterns are formed with different bars or different number of candlesticks, there could be one, two or three candlesticks forming a certain pattern. With a single candlestick there could be patterns like Spinning Tops, Dojis, Marubozu, Hammer & Hanging Man, and Inverted Hammer & Shooting Star. With double candlesticks there could be patterns like Bullish and Bearish Engulfing, Tweezer Tops and Bottoms.

And, with three patterns like Morning and Evening Stars, Three Black Crows & White Soldiers, Three inside up and down can be formed.

## SPINNING TOPS

- Japanese candlesticks with a long upper shadow, long lower shadow and small real bodies are called **spinning tops**.
- The pattern indicates the **indecision** between the buyers and sellers.
- The small real body shows little movement from open to close, and the shadows indicate that both buyers and sellers were fighting but nobody could gain the upper hand.
- Neither buyers nor sellers could gain the upper hand, and the result was a standoff.
  - If a spinning top forms during an uptrend, this usually means there aren't many buyers left and a possible reversal in direction could occur.
  - If a spinning top forms during a downtrend, this usually means there aren't many sellers left and a possible reversal in direction could occur.

### Spinning Tops



Now, let's see what are spinning tops?

Japanese candlesticks with a long upper shadow, long lower shadow, and small real bodies are called spinning tops. The color of the real body is not very important. The pattern indicates the indecision between the buyers and sellers.

The small real body shows little movement from open to close, and the shadows indicate that both buyers and sellers were fighting but nobody could gain the upper hand. Even though the session opened and closed with little change, prices moved significantly higher and lower in the meantime. Neither buyers nor sellers could gain the upper hand and the result was a standoff.

If a spinning top forms during an uptrend, this usually means there aren't many buyers left and a possible reversal in direction could occur. If a spinning top forms during a downtrend, this usually means there aren't many sellers left and a possible reversal in direction could occur.

## DOJIS

- **Doji candlesticks** have the **same open and close price** or at least their bodies are extremely short.
- Doji candles suggest **indecision or a struggle** for turf positioning between buyers and sellers.
- Prices move above and below the open price during the session, but close at or very near the open price. Neither buyers nor sellers were able to gain control and the result was essentially a draw.
- There are **FOUR** special types of Doji candlesticks:



Doji candlesticks have the same open and close price or at least their bodies are extremely short. A Doji should have a very small body that appears as a thin line. Doji candles suggest indecision or a struggle for turf positioning between buyers and sellers. Prices move above and below the open price during the session, but close at the open price or very near to the open price. Neither buyers nor sellers were able to gain control and the result was essentially a draw.

There are four special types of Doji candlesticks: Long-legged Doji, Dragonfly Doji, Gravestone Doji and Four price Doji.

When a Doji forms on your chart, pay special attention to the preceding candlesticks. If a Doji forms after a series of candlesticks with long hollow bodies, the Doji signals that the buyers are becoming exhausted and are weakening. For prices to continue rising, more buyers are needed but there aren't anymore!

And, if a Doji forms after a series of candlesticks with long filled bodies, the Doji signals that sellers are becoming exhausted and weak. In order for price to continue falling, more sellers are needed but sellers are all tapped out!

## MARUBOZU

- Marubozu means there are no shadows from the bodies.
- Depending on whether the candlestick's body is red or green, the high and low are the same as its open or close.
- **Green Marubozu** is a very bullish candle as it shows that buyers were in control the entire session. It usually becomes the first part of a bullish continuation or a bullish reversal pattern.
- **Red Marubozu** is a very bearish candle as it shows that sellers controlled the price action the entire session. It usually implies bearish continuation or bearish reversal.

### Marubozu



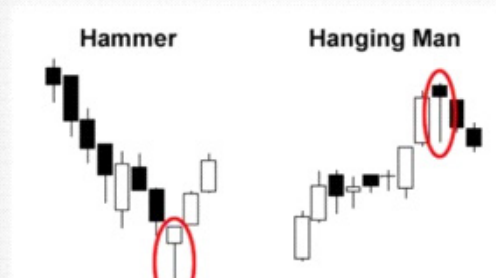
Marubozu means there are no shadows from the bodies and they are more potent long candlesticks. Depending on whether the candlestick's body is green or red, the high and low are the same as its open or close.

A Green Marubozu contains a long green body with no shadows. The open price equals the low price and the close price equals the high price. This is a very bullish candle as it shows that buyers were in control throughout the session. It usually becomes the first part of a bullish continuation or a bullish reversal pattern.

A Red Marubozu contains a long red body with no shadows. The open equals the high and the close equals the low. This is a very bearish candle as it shows that sellers controlled the price action throughout the session. It usually implies bearish continuation or bearish reversal.

## HAMMER AND HANGING MAN

- The hammer and hanging man look exactly alike but have totally different meanings depending on past price action.
- Both have cute little bodies, long lower shadows, and short or absent upper shadows.
- The **hammer** is a bullish reversal pattern that forms during a downtrend. It is named because the market is hammering out a bottom. When price is falling, hammers signal that the bottom is near and price will start rising again.
- The **hanging man** is a bearish reversal pattern that can also mark a top or strong resistance level. When price is rising, the formation of a hanging man indicates that sellers are beginning to outnumber buyers.



The hammer and hanging man look exactly alike but have totally different meanings, depending on past price action. Both have cute little bodies, long lower shadows, and short or absent upper shadows.

The hammer is a bullish reversal pattern that forms during a downtrend. It is named because the market is hammering out a bottom. When price is falling, hammers signal that the bottom is near and price will start rising again.

The long lower shadow indicates that sellers pushed prices lower, but buyers were able to overcome this selling pressure and closed near the open. Just because you see a hammer form in a downtrend doesn't mean you automatically place a buy order! More bullish confirmation is needed before it's safe to pull the trigger.

A typical example of confirmation would be to wait for a green candlestick to close (above the open) to the right side of the hammer.

The hanging man is a bearish reversal pattern that can also mark a top or strong resistance level. When price is rising, the formation of a hanging man indicates that sellers are beginning to outnumber buyers. The long lower shadow shows that sellers pushed prices lower during the session.

Buyers were able to push the price back up, but only near the open. This tells us that there are no buyers left to provide the necessary momentum to keep raising the price.

## INVERTED HAMMER & SHOOTING STAR

- The inverted hammer and shooting star look identical and the only difference between them is **whether you're in a downtrend or uptrend**.
  - An inverted hammer is a **bullish** reversal candlestick.
  - A shooting star is a **bearish** reversal candlestick.
- The **inverted hammer** occurs when price has been falling suggests the possibility of a reversal. Its long upper shadow shows that buyers tried to bid the price higher.
- The **shooting star** is a bearish reversal pattern that looks identical to the inverted hammer but occurs when price has been rising. Its shape indicates that the price opened at its low, rallied, but pulled back to the bottom.



The inverted hammer and shooting star also look identical. The only difference between them is whether you're in a downtrend or uptrend. An inverted hammer is a bullish reversal candlestick. A shooting star is a bearish reversal candlestick. Both candlesticks have petite little bodies, long upper shadows, and small or absent lower shadows.

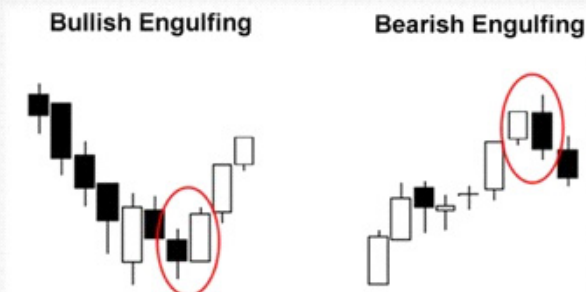
The inverted hammer occurs when price has been falling suggesting the possibility of a reversal. Its long upper shadow shows that buyers tried to bid the price higher. Since the sellers weren't able to close the price any lower, this is a good indication that everybody who wants to sell has already sold. And if there are no more sellers, who is left? Only buyers!

The shooting star is a bearish reversal pattern that looks identical to the inverted hammer but occurs when price has been rising. Its shape indicates that the price opened at its low, rallied, but pulled back to the bottom.

This means that buyers attempted to push the price up, but sellers came in and overpowered them. This is a definite bearish sign since there are no more buyers left.

## ENGULFING CANDLES

- **Bullish engulfing pattern:**
  - It is a dual candlestick pattern that signals a strong up move may be coming. It happens when a bearish candle is immediately followed by a larger bullish candle.
  - The second candle “engulfs” the bearish candle, it means buyers are flexing their muscles and that there could be a strong up move after a recent downtrend.
- **Bearish engulfing pattern:**
  - This type of candlestick pattern occurs when the bullish candle is immediately followed by a bearish candle that completely “engulfs” it.
  - This means that sellers overpowered the buyers and that a strong move down could happen.



It is better to use dual candlesticks pattern because of more conformability, so let's see what all dual candlesticks patterns are there.

Engulfing candles: The bullish engulfing pattern is a two candlestick pattern signaling that a strong up move may be coming. It happens when a bearish candle is immediately followed by a larger bullish candle. The second candle “engulfs” the bearish candle. This means more buyers are entering the market and that there could be a strong up move after a recent downtrend or a period of consolidation.

On the other hand, the bearish engulfing pattern is the opposite of the bullish pattern. This type of candlestick pattern occurs when the bullish candle is immediately followed by a bearish candle that completely “engulfs” it.

This means that sellers overpowered the buyers and that a strong move down could happen.

## TWEEZER TOPS AND BOTTOMS

- The tweezers are dual candlestick reversal patterns. This type of candlestick pattern are usually be spotted after an extended uptrend or downtrend, indicating that a reversal will soon occur.
- Tweezers have following characteristics:
  - The first candlestick is the same as the overall trend. If price is moving up, then the first candle should be bullish.
  - The second candlestick is opposite the overall trend. If price is moving up, then the second candle should be bearish.
  - The shadows of the candlesticks should be of equal length.
  - Tweezer Tops should have the same highs, while Tweezer Bottoms should have the same lows.

Tweezer Bottoms



Tweezer Tops



The tweezers are dual candlestick reversal patterns. This type of candlestick pattern is usually being spotted after an extended uptrend or downtrend, indicating that a reversal will soon occur.

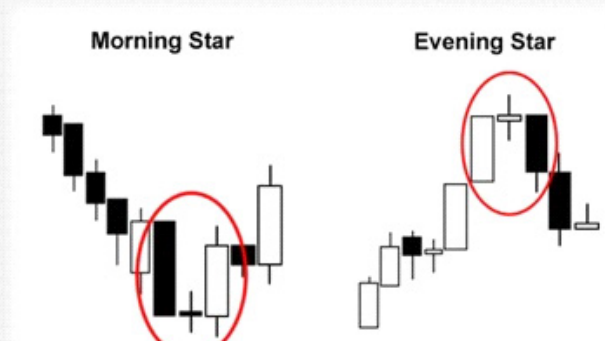
The most effective tweezers have the following characteristics:

The first candlestick is the same as the overall trend. If price is moving up, then the first candle should be bullish. The second candlestick is opposite the overall trend. If price is moving up, then the second candle should be bearish.

The shadows of the candlesticks should be of equal length. Tweezer tops should have the same highs, while tweezer bottoms should have the same lows. That's all for dual candlestick patterns and now let's see triple candlestick pattern.

## MORNING & EVENING STARS

- The morning star and the evening star are triple candlestick patterns that you can usually find at the **end of a trend**.
- They are reversal patterns that can be recognized through three characteristics:
  - The first candlestick is a bullish or bearish candle, which is part of a recent uptrend.
  - The second candle has a small body, indicating that there could be some indecision in the market. This candle can be either bullish or bearish.
  - The third candlestick acts as a confirmation that a reversal is in place, as the candle closes beyond the midpoint of the first candle.



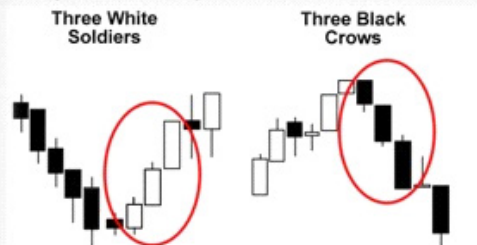
The morning star and the evening star are triple candlestick patterns that you can usually find at the end of a trend. They are reversal patterns that can be recognized through these three characteristics.

The first candlestick is a bullish or a bearish candle, which is part of a recent uptrend. The second candle has a small body, indicating that there could be some indecision in the market. This candle can be either bullish or bearish.

And, the third candlestick acts as a confirmation that a reversal is in place, as the candle closes beyond the midpoint of the first candle.

## THREE SOLDIERS AND CROWS

- The **three white soldiers** pattern is formed when three long bullish candles follow a DOWNTREND, signaling a reversal has occurred.
  - The first of the three soldiers ends the downtrend implies that the downtrend is over.
  - The second candlestick should be bigger than the previous candle's body & the last candlestick should be at least the same size as the second candle and have a small or no shadow.
- The **three black crows** candlestick pattern is formed when three bearish candles follow a strong UPTREND, indicating that a reversal is in the works.
  - The second candle's body should be bigger than first candle and should close at or very near its low. Finally, the third candle should be the same size or larger than second candle's body with a very short or no lower shadow.



The three white soldiers pattern is formed when three long bullish candles follow a downtrend, signaling a reversal has occurred. This type of triple candlestick pattern is considered as one of the most potent bullish signals, especially when it occurs after an extended downtrend and a short period of consolidation.

The first of the three soldiers is called the reversal candle. It either ends the downtrend or implies that the period of consolidation that followed the downtrend is over. For the pattern to be considered valid, the second candlestick should be bigger than the previous candle's body.

Also, the second candlestick should close near its high, leaving a small or non-existent upper wick. For the three white soldiers' pattern to be completed, the last candlestick should be at least the same size as the second candle and have a small or no shadow.

The three black crows candlestick pattern is just the opposite of the three white soldiers. It is formed when three bearish candles follow a strong uptrend, indicating that a reversal is in the work. The second candle's body should be bigger than the first candle and should close at or very near its low.

Finally, the third candle should be the same size or larger than the second candle's body with a very short or no lower shadow.

## THREE INSIDE UP

- The **three inside up** candlestick formation is a trend-reversal pattern that is found at the bottom of a DOWNTREND. This triple candlestick pattern indicates that the downtrend is possibly over and that a new uptrend has started.
- For a valid three inside up candlestick formation, look for these properties:
  - The first candle should be found at the bottom of a downtrend and is characterized by a long bearish candlestick.
  - The second candle should at least make it up all the way up to the midpoint of the first candle.
  - The third candlestick needs to close above the first candle's high to confirm that buyers have overpowered the strength of the downtrend.

Three Inside Up



The three inside up candlestick formation is a trend-reversal pattern that is found at the bottom of a downtrend. This triple candlestick pattern indicates that the downtrend is possibly over and that a new uptrend has started.

For a valid three inside up candlestick formation, look for these properties:

The first candle should be found at the bottom of a downtrend and is characterized by a long bearish candlestick. The second candle should at least make it up all the way up to the midpoint of the first candle. The third candlestick needs to close above the first candle's high to confirm that buyers have overpowered the strength of the downtrend.

## THREE INSIDE DOWN

- The **three inside down** candlestick formation is found at the top of an UPTREND. It means that the uptrend is possibly over and that a new downtrend has started.
- A three inside down candlestick formation needs to have the following characteristics:
  - The first candle should be found at the top of an uptrend and is characterized by a long bullish candlestick.
  - The second candle should make it up all the way down the midpoint of the first candle.
  - The third candlestick needs to close below the first candle's low to confirm that sellers have overpowered the strength of the uptrend.

Three Inside Down



Conversely, the three inside down candlestick formation is found at the top of an uptrend. It means that the uptrend is possibly over and that a new downtrend has started.

A three inside down candlestick formation needs to have the following characteristics.

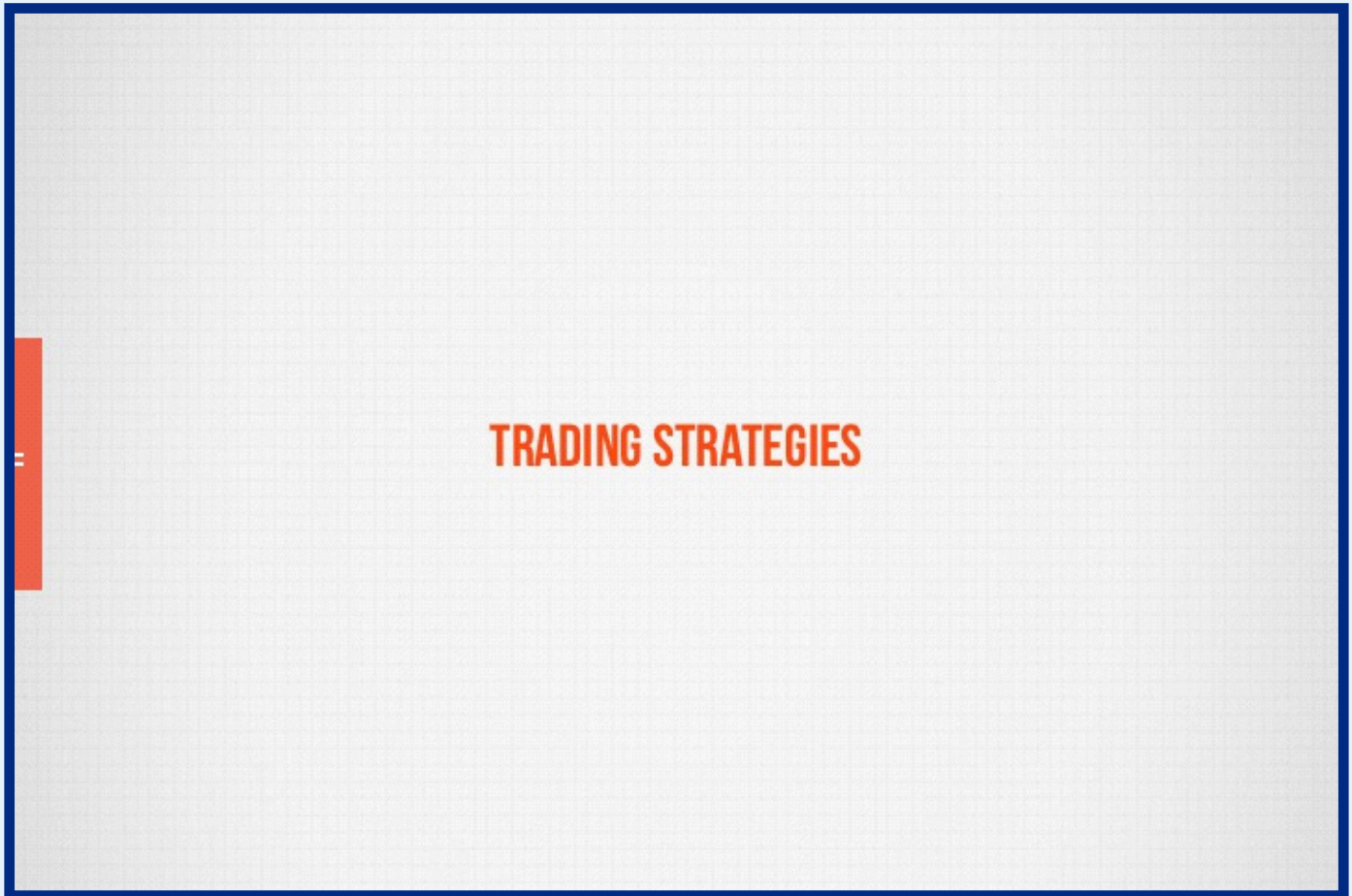
The first candle should be found at the top of an uptrend and is characterized by a long bullish candlestick. The second candle should make it up all the way down the midpoint of the first candle. The third candlestick needs to close below the first candle's low to confirm that sellers have overpowered the strength of the uptrend.

We've covered a lot about Japanese candlesticks. Hopefully, you're not confused but are actually now fired up about candlestick charts. You have now enough knowledge and information for working with candlestick pattern for trading. But you have to combine candlestick analysis with other technical indicators for best results, and we will discuss those indicators in upcoming slides.

And finally, here are some words of wisdom: This is a cryptocurrency market and everything is highly unpredictable and nothing is confirmed. So, always keep your mind open and heart strong before you trade.

# CHAPTER 14

## Trading Strategies



In this section we will discuss about trading strategies and using technical indicators on some popular trading platforms. There are various techniques for making trades over trading platforms, and to get thorough understanding of the practical use of these indicators will help you in making better decisions while trading.

Please note the fact that any opinions, news, research, analysis, prices, other information, or links to third-party sites are provided as general market commentary and do not constitute investment advice.

## TECHNICAL INDICATORS

- Charting sites or programs and trading interfaces commonly feature indicators—mathematically-derived visualizations of revelatory market aspects.
- It is used for identifying trends, or the general direction in which a security is moving.
- It is used to look past the volatility and identify an uptrend when they see a sequence of higher highs and higher lows. In contrast, it can also be used to single out a downtrend to identify a string of lower lows and lower highs.
- Common useful indicators include:
  - Trend Lines and Channels
  - Moving averages
  - Bollinger Bands
  - Bull Flag Momentum
  - Reversal Trading
  - Renko Charts
  - Support and resistance
  - Fibonacci Retracements
  - Relative Strength Index
  - ABCD Pattern
  - VWAP Trading

Charting sites or programs and trading interfaces commonly feature indicators that are mathematically-derived visualizations of revelatory market aspects. Identifying trends, or the general direction in which a currency is moving, can be very helpful for Bitcoin traders. However, singling these trends out can be a challenge. Digital currencies can be highly volatile, and looking at a chart of Bitcoin's price movements will likely show a series of highs and lows.

Technicians know that they can look past the volatility and identify an uptrend when they see a sequence of higher highs and higher lows. In contrast, they can single out a downtrend when they identify a string of lower lows and lower highs. There are also sideways trends, in which a Cryptocurrency experiences little in the way of upward or downward movement.

Traders should know that trends come in many lengths, including short-term, intermediate, and long-term. By leveraging technical analysis, traders can gauge market sentiment, identify trends and potentially make better-informed investment decisions.

However, there are a few key variables they should keep in mind. For starters, technical analysis is a very practical approach, looking only at a security's price and volume. As a result, relying on technical analysis could potentially cause a trader to either miss out on opportunities to buy currency when it is undervalued or purchase the digital currency when the price may be inflated, at least according to the fundamentals.

To manage this risk, traders can potentially combine fundamental analysis with technical analysis. For example, if a trader concludes that technical indicators and patterns are telling him to buy; he can help affirm this by evaluating some fundamental data. Alternatively, a trader could leverage fundamental analysis to determine whether the currency is undervalued or overvalued and then harness technical analysis to calculate the best point to either buy or sell the digital currency.

Common useful indicators include Trend lines and channels, Support and resistance levels, Moving Averages, Relative Strength Index, Fibonacci Retracements, Bollinger Bands, RSI, Bull flag momentum and some others. Now we will discuss these indicators in detail.

# TREND LINES & CHANNELS

- **Trend Lines:**
  - There are three types of trend lines: **Uptrend, Downtrend and Sideways Trend line**
  - An **uptrend** line is drawn along the bottom of easily identifiable support areas. In **downtrend**, trend line is drawn along the top of easily identifiable resistance areas.
  - It takes at least two tops or bottoms to draw trend line but it takes three to confirm trend line. The Steeper the trend line, less reliable it is and more likely it will break.



Let's start with Trend lines and channels. Trend lines are probably the most common form of technical analysis in crypto trading. They are probably one of the most underutilized ones as well. If drawn correctly, they can be as accurate as any other method. Unfortunately, most crypto traders don't draw them correctly or try to make the line fit the market instead of the other way around.

Trend lines are drawn simply by connecting the recent highs or lows of price action. To be specific, an uptrend line or ascending trend line is drawn by connecting the latest lows with a straight line. A downtrend line or descending trend line is created by connecting the latest highs with a straight line.

Let's see how you can draw trend lines and then how to use it?

Here are some important things to remember using trend lines:

It takes at least two tops or bottoms to draw a valid trend line but it takes three to confirm a trend line. The steeper the trend line you draw, the less reliable it is going to be and the more likely it will break. Like horizontal support and resistance levels, trend lines become stronger the more times they are tested. And most importantly, do not draw trend lines by forcing them to fit the market. If they do not fit right, then that trend line isn't a valid one!

## TREND LINES AND CHANNELS

- **Channels:**
  - They are used in **technical analysis** to determine good places to buy or sell. Both the tops and bottoms of channels represent potential areas of support or resistance.
  - By drawing a parallel line at the same angle of the trend line, we create a channel.
  - The bottom of channel is considered a buy zone while the top is considered a sell zone.



If we take this trend line theory one step further and draw a parallel line at the same angle of the uptrend or downtrend, we will have created a channel. Channels are just another tool in technical analysis which can be used to determine good places to buy or sell. Both the tops and bottoms of channels represent potential areas of support or resistance.

Channels are simply trend lines drawn parallel to one another. In particular, an ascending channel is formed when the rising trend line connecting the lows of recent price action has a parallel rising trend line connecting the latest highs. A descending trend channel is created by drawing a trend line connecting the latest highs and having a parallel downtrend line connecting the latest lows. When prices hit the lower trend line, this may be used as a buying area and when prices hit the upper trend line, this may be used as a selling area.

Let's see how you can draw channels and then how to use it? Important things to remember about drawing channels:

When constructing a channel, both trend lines must be parallel to each other. Generally, the bottom of channel is considered a buy zone while the top of channel is considered a sell zone. Like in drawing trend lines, never force the price to the channels that you draw! A channel boundary that is sloping at one angle while the corresponding channel boundary is sloping at another is not correct, and could lead to bad trades.

# SUPPORT AND RESISTANCE

- Support is the level where price finds it difficult to fall below until eventually it fails to do so and bounces back up. It's simply many traders making trading decisions at that level.
- Resistance is the level where price finds it hard to break through to rise above it until it fails to and is pushed back down.
- One should always suspect a reversal at Support and Resistance as there is a high probability that price action will reverse at those key levels.



Support and Resistance: This support and resistance zones strategy will enable you to take trades exactly at the area price will reverse. Trading support and resistance lines are critical for every trader to implement into their system.

Support is the level where price finds it difficult to fall below until eventually it fails to do so and bounces back up. It's simply many traders making trading decisions at that level and resistance is the level where price finds it hard to break through to rise above it until it fails and is pushed back down.

One should always suspect a reversal in support and resistance as there is a high probability that price action will reverse at those key levels.

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In the next section, we will learn how to draw these levels and how they work?

## MOVING AVERAGES

- It helps in smoothing out a digital currency's price fluctuations so market participants can get a better sense of where the price has been going.
- The most basic kind of moving average is the 'simple moving average', which is determined by calculating a security's average price over a specific time period.
- A similar tool is 'exponential moving average', which gives greater emphasis to more recent price values when calculating an average.
- By analyzing moving averages, traders can get a better sense of when momentum shifts.



Moving averages, it helps in smoothing out a digital currency's price fluctuations so market participants can get a better sense of where the price has been going. Moving averages lag because they are based on past prices. Despite this lag, moving averages help smooth price action and filter out the noise. They also form the building blocks for many other technical indicators and overlays, such as Bollinger Bands, MACD, etc.

The two most popular types of moving averages are the Simple Moving Average (SMA) and the Exponential Moving Average (EMA). These moving averages can be used to identify the direction of the trend or define potential support and resistance levels.

The most basic kind of moving average is the 'simple moving average,' which is determined by calculating a security's average price over a specific period. A similar tool is 'exponential moving average,' which gives greater emphasis to more recent price values when calculating an average.

By analyzing moving averages, traders can get a better sense of momentum shifts. So let's see how we can use it in trade analysis.

Moving averages can also be used to generate signals with simple price crossovers. A bullish signal is generated when prices move above the moving average. A bearish signal is generated when prices move below the moving average. Price crossovers can be combined to trade within the bigger trend.

## RELATIVE STRENGTH INDEX

- It is a momentum oscillator that measures the speed and change of price movements
- RSI oscillates between zero and 100 and is considered overbought when above 70 and oversold when below 30.
- The default look-back period for RSI is 14, but this can be lowered to increase sensitivity or raised to decrease sensitivity.
- The RSI is calculated by calculating the momentum of the ratio of higher closes to lower closes - so the more the currency moves up - the more positive the RSI.



Next is RSI or Relative Strength Index.

RSI is the relative momentum indicator that measures the speed and change of price movements. It's just an oscillator that measures the price performance over a given number of reporting periods. The default look-back period for RSI is 14, but this can be lowered to increase sensitivity or raised to decrease sensitivity.

RSI oscillates between 0 and 100 and is considered overbought when above 70 and oversold when below 30. You can also vary these levels and play with these levels until you get comfortable but the bottom-line is 70, and level 30 just works fine.

The RSI is calculated by calculating the momentum of the ratio of higher closes to lower closes - so more the currency moves up - more positive is the RSI. RSI attempts to quantify the trading force behind price action to highlight times when the magnitude of a move looks unsustainable.

The most basic RSI application is to use it to identify areas that are potentially overbought or oversold. Regarding market analysis and trading signals, RSI moving above the horizontal 30 reference level is viewed as a bullish indicator, while the RSI moving below the horizontal 70 reference level is seen to be a bearish indicator, which helps in making a more balanced trade.

Now, let's see how you can use it?

## FIBONACCI RETRACEMENTS

- These are ratios used to identify potential reversal levels. These ratios are found in the Fibonacci sequence. The most popular Fibonacci Retracements are 61.8% and 38.2%.
- These are often used to identify the end of a correction or a counter-trend bounce. Corrections and counter-trend bounces often retrace a portion of the prior move.
- While short 23.6% retracements do occur, the 38.2-61.8% covers the more possibilities (with 50% in the middle). This zone may seem big, but it is just a reversal alert zone.



Fibonacci retracements are a very important and popular tool.

This study shows if the market rallies back from the lowest low then how much of the original move is market going to take back. The ratios used in this are used to identify potential reversal levels. These ratios are found in the Fibonacci sequence.

The most popular Fibonacci Retracements are 61.8% and 38.2%. 38.2% is known as the 1st stop target so never make a move until this 38.2% mark is crossed and this advice will surely save you from a lot of troubles.

If 38.2 resolved bullishly, then we will be most likely to go to the market next to optimal trade entry zone between 61.8% and 78.6% fibs.

It is advisable to buy on the lows and sell at the highs. Work upon these fib levels, and you will surely notice that trading patterns closely follow these zones.

## BOLLINGER BANDS

- Bollinger Bands consist of a middle band with two outer bands. The middle band is a simple moving average(SMA) that is usually set at 20 periods.
- The bands automatically widen when volatility increases and narrow when volatility decreases.
- For signals, Bollinger Bands can be used to identify M-Tops and W-Bottoms or to determine the strength of the trend.
- The “Bollinger Squeeze” is a breakout signal that identifies the start of a new trend, useful for trending markets.



Next is Bollinger Bands, it consists of a middle band with two standard deviations from the moving average also known as outer bands. The middle band is a simple moving average (SMA) that is usually set at 20 periods. The two bands are used to show the support and the resistance levels. The bands automatically widen when volatility increases and narrow when volatility decreases.

Let's see how it works?

Two main strategies are: one is Bollinger bounce in which when the candle hits the top band then it will go down to hit the lower band of Bollinger band and then again rises back to touch the top. It will bounce similarly till the very end. The second is Bollinger squeeze which is pretty self-explanatory when the bands squeeze together; it usually means that a breakout is ready to happen.

If the candles start to break out above the top band, then it will continue to go all the way up, and if the candles start to break out below the bottom band, the price will usually continue to go down.

The “Bollinger Squeeze” is a breakout signal that identifies the start of a new trend, useful for trending markets. For signals, Bollinger bands can be used to identify M-Tops and W-Bottoms or to determine the strength of the trend. So Bollinger bands are used to decide the breakout zone in the trade.

## BULL FLAG MOMENTUM

- The bull flag pattern is probably the most bullish chart pattern you can trade. As the name suggests, it looks like a flag pole with a flag on the top portion of the pole.
- Bull flag patterns are generally much more bullish than simple flag patterns because the commodity has already proven that it can make a huge move in short period of time.
- This pattern starts with a strong vertical price spike and eventually, the price peaks and forms an orderly pullback where the highs and lows are parallel to each other, forming a tilted rectangle.



Bull Flag Momentum is a part of flag pattern.

A flag pattern is a trend continuation pattern, appropriately named after its visual similarity to a flag on a flagpole. A “flag” is composed of an explosive strong price move that forms the flagpole, followed by an orderly and diagonally symmetrical pullback, which forms the flag. Flag patterns start off violently as the ‘other’ side gets caught off guard on the trend move or as bulls/bears become overambitious.

The bull flag pattern is probably the most bullish chart pattern you can trade. In a bull flag pattern, there needs to be a 90% price rise or more within a couple of months before the horizontal consolidation, anything less than that and you have a less bullish flag pattern.

How to Plan a Trade Using Flag Patterns:

Actually, flat patterns require the patience to wait for the flag to form and plot the upper and lower trend lines. These will contain your entry and stop levels. It is best to use a momentum indicator to time your entries and exits.

Some key points for the Bullish Flag:

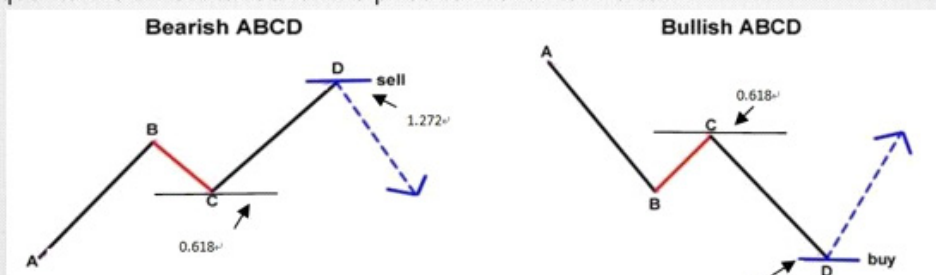
The Bullish flag is most significant when it appears after a sharp advance in price.

Ideally, the lowest price point of the Bullish flag does not drop below the breakout point. A drop and continuation below the breakout point could signal a change in trend.

Traders wait for a breakout from the flag to confirm that the preceding trend is still in play. It is best not to anticipate a breakout one way or the other. Some consider the flag area to be a “no trade zone”.

## ABCD PATTERN

- The ABCD pattern is a visual, geometric price/time pattern of 3 consecutive price swings, or trends and it looks like a lightning bolt on price chart.
- Bullish patterns help identify higher probability opportunities to buy, or go "long." Bearish patterns help signal opportunities to "short," or sell.
- For both the bullish and bearish versions of the ABCD chart pattern, the lines AB and CD are known as the **legs** while BC is called the **correction** or **retracement**.
- All you have to do is wait for the entire pattern to complete (reach point D) before taking any short or long positions. More strictly, the length of line AB should be equal to the length of line CD and the time it takes for the price to go from A to B should be equal to the time it takes for the price to move from C to D.



Next is the ABCD price pattern.

ABCD is one of the classic chart patterns which are repeated over and over again. The ABCD pattern shows perfect harmony between price and time and is also referred to as 'measured moves'. An ABCD pattern reflects the common, rhythmic style in which the market moves. It is a visual, geometric price/time pattern comprised of 3 consecutive price swings, or trends and it looks like a lightning bolt on price chart. It is a leading indicator that helps determine where and when to enter and exit a trade.

The ideal way to get started with the ABCD pattern is to look for highs and lows in the price. Bullish patterns help identify higher probability opportunities to buy, or go "long." Bearish patterns help signal opportunities to "short," or sell.

All you have to do is, wait for the entire pattern to complete (reach point D) before taking any short or long positions. More strictly, the length of line AB should be equal to the length of line CD and the time it takes for the price to go from A to B should be equal to the time it takes for the price to move from C to D. Within the ABCD patterns, there are 3 types: Price and Time, Classic ABCD and ABCD extension. Here you can see in this picture how bullish and bearish ABCD patterns are formed. For both the bullish and bearish versions of the ABCD chart pattern, the lines AB and CD are known as the legs while BC is called the correction or retracement.

## RENKO CHARTS

- The Renko chart is a simplistic, yet effective, method that abstracts from time, focusing purely on the most important price action.
- Since time is not a factor for Renko charts, it may be a technique that should be used for swing or position traders rather than for intraday traders.
- Renko chart consists of small blocks of Renko candles or bricks. A brick is drawn on a Renko chart consisting of time and value, only when an asset's value moves by a certain amount.
- The brick is only added when the graph moves by a certain amount, so it gives us a steady progress of the price impervious to fluctuations.
- The main advantage of using it is to identify trend reversals.



A common complaint from traders is that they seem to exit from profitable trades too soon. They find that fear grips them and they find they could have made much more money if they only stayed in the trade longer. In our search for profits, we are often shaken out by the market's noise.

What if there was a way to chart that minimizes the effect of that market noise and could filter out small corrections while still giving you the ability to see reversals that could put your profits in jeopardy? Well you are in luck because there is such a tool. It is known as a Renko chart.

Renko is based on movements in price and not time. There must be a particular size of movement or the chart ignores it. Since time is not a factor for Renko charts, it may be a technique that should be used for swing or position traders rather than for intraday traders. A Renko chart consists of small blocks of Renko bricks. Now a brick is drawn on a Renko chart consisting of time and value only when an asset's value moves by a certain amount. The size of the brick is chosen by the trader and he needs to choose it according to the graph scale. Now the brick is only added when the graph moves by a certain amount that we know so it gives us a steady progress of the price impervious to fluctuations.

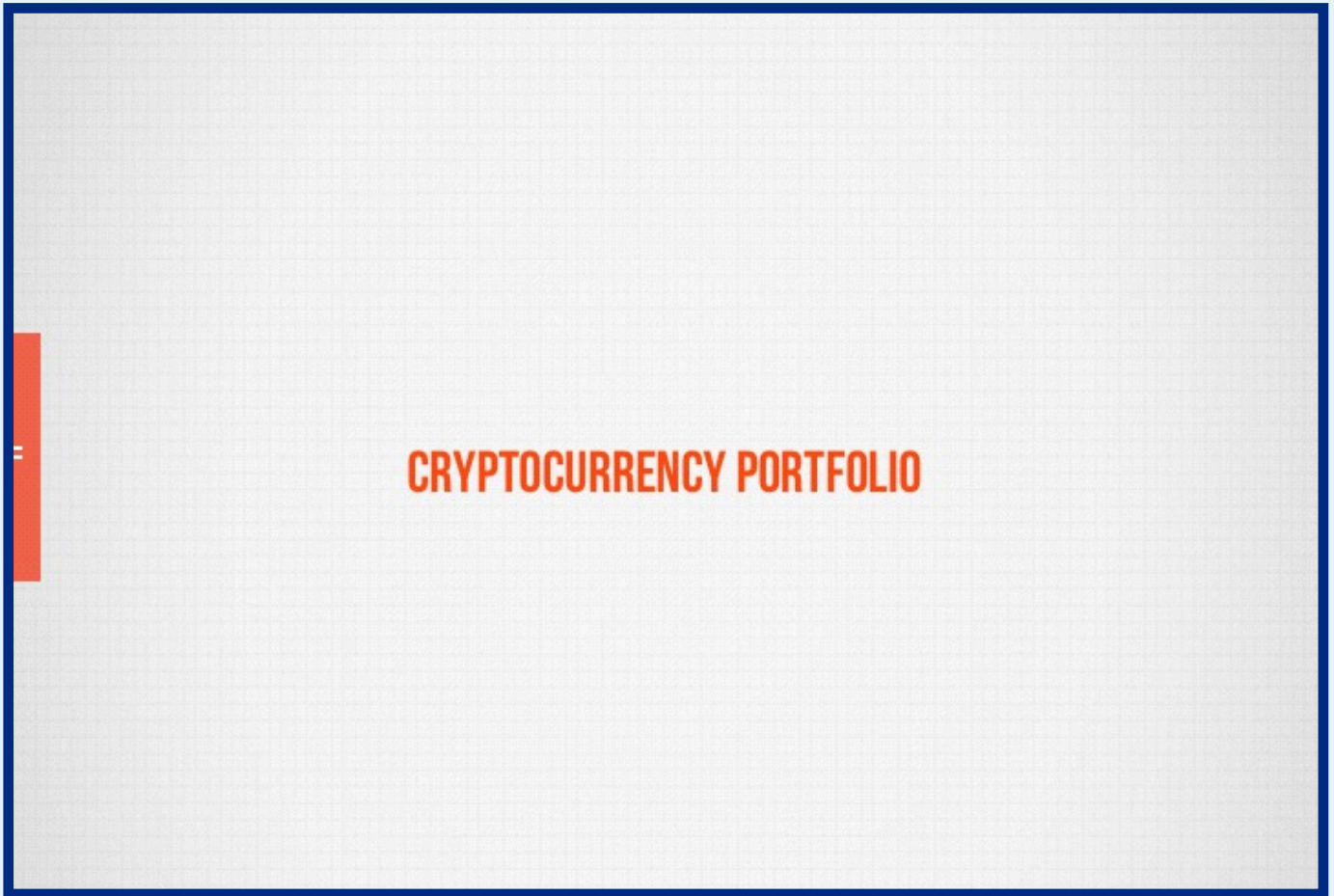
Also, to make things smoother, a Renko chart only charts closing prices at the end of a session. Now Cryptocurrency has no closing price of the day unlike stock exchange which closes at 5 PM. So, we create our own arbitrary closing prices based on time milestones. You can make it after 24 hours, an hour or even ten minutes but you need to be consistent with it and the more volatile the currency the longer the wait for the closing price should be there. It is because with more volatility comes increased "noise" that is clouding the actual price of the coin. You need to cancel out the noise and that is what Renko charts are best at doing.

Renko charts are extremely simple but trading techniques to be used with this chart are somewhat limited because of that. It also takes a lot of time to make sense from Renko charts. These charts usually take a lot of time to form a new chart and trade using it.

Now you must be comfortable with trading tools, platforms and technical indicators. So start working on these platforms and work with all the tools and platforms that are available on these and get ready for planned and strategic trading.

# CHAPTER 15

## Cryptocurrency Portfolio



Now we will understand how to make a Cryptocurrency portfolio, what other Cryptocurrencies that can be a part of your portfolio, and its importance to diversify your portfolio?

## WHAT SHOULD YOU BUY?

- Bitcoin is still a standard item of every portfolio, but no longer the only coin.
- In every well-balanced crypto-portfolio today, besides Bitcoin you find coins like:
  - Ethereum
  - Ripple
  - Litecoin
  - Dash
  - Monero
  - Zcash
- To have a balanced portfolio at one point in time, it might be a good strategy to simply reflect the ten most valuable currencies in your portfolio.
- More interesting however is it to take some time, read about those coins & the technologies behind it, decide, if their vision gets you and make this to the base of your asset selection.

What is a balanced portfolio? A balanced portfolio must be diversified which means you invest in various Cryptocurrencies in small amounts. What should you buy? First of all, Bitcoin is considered to be gold of crypto sphere. Bitcoin is still a standard item of every portfolio, but it is no longer the only coin to have in your portfolio.

In every well-balanced crypto-portfolio today you will find coins like Ethereum, Ripple, Litecoin, Dash, Monero, Zcash, etc. You must consider a portfolio which includes not only Cryptocurrencies but also different utility tokens. To have a balanced portfolio, it might be a good strategy to hold the ten most valuable Cryptocurrencies in the portfolio simply.

More interestingly, however, is to take some time, read about those coins and the technologies behind it. Decide, if their vision gets you and make this the base of your asset selection.

## CLASSIFICATION



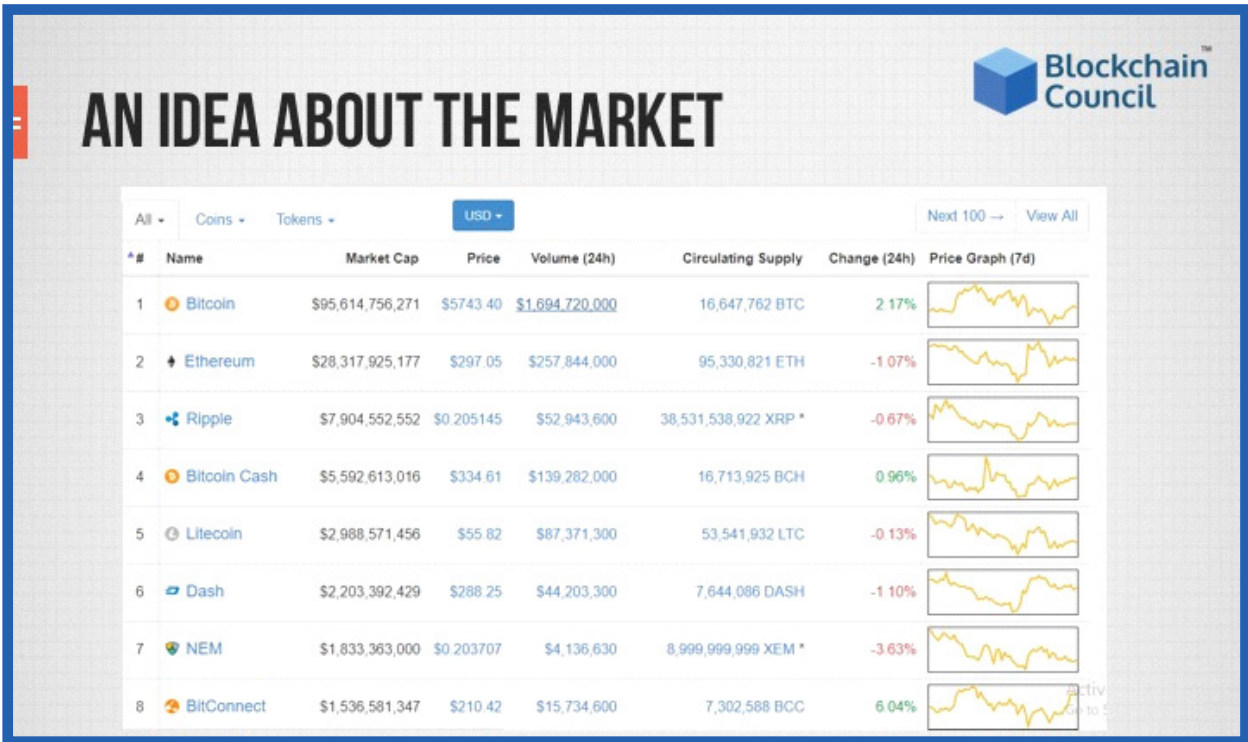
- **Focused on privacy:** Dash, Monero, Zcash
- **Smart Contracting:** Ethereum, Ethereum Classic, Neo
- **Scaling Payments:** Litecoin, Dash
- **Altcoins:** Litecoin, Dogecoin, Peercoin, Feathercoin, Zetacoin, Novacoin, etc

First of all, before we move further, let's try to understand what kind of Cryptocurrencies we have in the market. As you already know, there are different types of Cryptocurrencies. The classification is used to differentiate coins by use-cases and their properties. The coins or tokens which are focused on privacy also known as privacy coins are used for creating anonymity.

The days when Bitcoin Blockchain was anonymous are long gone, that's why now, we need much more radical Cryptocurrencies that will be truly anonymous. DASH, ZCASH, and Monero were born because people understood the necessity of these kinds of coins.

Another type of Cryptocurrency is based on smart contracts and is known as distributed computing cryptos. Examples of such coins are Ethereum, Ethereum Classic, and NEO, etc. The cryptos that are used for scaling payments are Litecoin, Dash, etc. Next type is the Bitcoin fork coins.

This type of Cryptocurrency is known as Altcoins and has the only function of transferring the value from one wallet to another.



Here you can see the “market cap” of all relevant Cryptocurrencies. Market capitalization is one way in which we rank the relative size of a Cryptocurrency. It’s calculated by multiplying the price by the circulating Supply.

## REASONS TO DIVERSIFY

- To develop a proper understanding of the market and the technology behind Cryptocurrencies.
- To maximize gains but minimize potential losses
- Unclearly about the structure, purpose and monetary policies of certain Cryptocurrencies
- Investing in specific Cryptocurrencies as an experimental investment

The reason to diversify the crypto portfolio is to develop a proper understanding of the market and the technology behind the cryptocurrency. Another reason is to maximize gains and minimize potential losses.

Unclarity about the structure, purpose and monetary policies of certain Cryptocurrencies is also a major reason to make a diverse portfolio. Investing in specific Cryptocurrencies as an experimental investment is done to make bigger profits. It is also a part of portfolio diversification.



## WHAT TO DO?

- Diversify: Invest in different Cryptocurrencies in relatively small amount
- Real Crypto: Invest in Cryptocurrencies with actual use cases & real market value
- Risk Aversion: Invest no more than you can loose, on one particular Cryptocurrency
- Understanding: Invest in Cryptocurrencies with distinct monetary policies and purpose
- Active Community: Invest in Cryptocurrencies with active community and development

The things to make a balanced portfolio are to diversify the portfolio, which means you invest in various Cryptocurrencies in small amounts. Next thing to do is that you must invest in real cryptos with actual use-cases and market value. You must also consider risk aversion, so invest no more than you can lose.

You must understand cryptos and invest in Cryptocurrencies with distinct monetary policies and purpose. The last thing that you should consider is that the Cryptocurrency in which you are investing must have an active community and active development.

## DIVERSIFY THE LEVELS

- Foundation: Use most solid coins which are the part of long term investment e.g. Bitcoin, Ethereum etc.
- Middle: Other quite solid Cryptocurrencies which are not tokens and have the potential to make a boom in the market, usually Cryptocurrencies with their own Blockchain e.g. Dash, Monero etc.
- Tokens: These comes at the top, choose them last because a lot of utility tokens could fail. Choose to hold a very limited number of tokens and do it by doing a thorough research.

Levels of diversification have three levels- Foundation, Middle, and Tokens.

First, we have Foundation: It should consist of the most solid Cryptocurrencies. These cryptos should be able to survive the pressure of time. Is it hard to predict which Cryptocurrency will survive from 2-5 years? It is not just hard; it is impossible.

Here you can only use the judgment of the best experts in the industry and try to conduct your research. Even after everything, there is no certainty that these "Foundation" coins will not disappear in a year, some such coins are Bitcoin and Ether, etc. Then you have to choose the middle part of your pyramid.

It includes other solid Cryptocurrencies which are not tokens and have the potential to make a boom in the market, usually Cryptocurrencies with their Blockchain, for example, Waves, Stratis, Dash and other privacy coins. Tokens go next; choose them last because a lot of utility tokens fail. Just buy the best ones and hold on. Choose to hold a very limited number of tokens and do it by doing thorough research.

Remember that you cannot judge if your portfolio is the best one, regarding returns on investment in the long run. But the best thing you can do for your portfolio is to research Cryptocurrencies yourself and try to minimize risks by choosing only the best.

# CHAPTER 16

## How to Trade Successfully?



Now, let's discuss some tips to make profitable trades.

## BUILDING A WATCHLIST

- Building a watch list is a fundamental aspect of trading the market. There are many different ways for a trader to screen for possible trading candidates and much of this process will depend on the trader's style or trading technique.
- However, regardless of what type of trader you are, it is important to maintain a list of coins that may act in a certain way depending on what the markets do next.
- To build a Watchlist, do keep these things in mind:
  - Keep It Simple and Keep It Fresh
  - Start Off Big, Then Go Small
  - Play Favorites
  - Find What You Want
  - Stay In The Know
  - Use a computerized screener to find coins with superior fundamentals
  - Don't go overboard with the number of stocks.
  - Don't view the list sorted alphabetically.

First step is to build a watch list.

If you haven't done so already, create yourself a watch list of coins you'd like to keep on your radar. Use this to keep track of your ideas. You'll want to constantly cull this list so you have a ready reserve of potential investments.

Building a watch list is a fundamental aspect of trading in the market. There are many different ways for a trader to screen for possible trading candidates and much of this process will depend on the trader's style or trading technique. However, regardless of what type of trader you are, it is important to maintain a list of coins that may act in a certain way depending on what the markets does next.

To build a watch list, do keep these things in mind.

Keep it simple and keep it fresh that means if a coin no longer meets your investing criteria go ahead and delete it from the list. The goal is to have a list of coins that are close to buy points. Try to go through the entire list daily or weekly at the very least.

Start off big, and then go small. Don't go overboard with the number of stocks. You want to have a list of the best buy candidates. Limit the list to the number of ideas you feel comfortable managing. You might even consider an absolute limit, and force yourself to remove a stock in order to add another one.

Play favorites, that are already trading high in the market and those who have high market capitalization.

Find what you want; explore the potential and the purpose of the coin and then include those in your watch list and use a computerized screener to find coins with superior fundamentals. Don't view the list sorted alphabetically. If you are viewing the list on an intraday basis, try sorting by volume % change. This will highlight those coins experiencing exceptional volume.

## TRADING PLANS

- Trading is a business, so you have to treat it as such if you want to succeed.
- Don't follow someone else's trading advice blindly. Make a plan for yourself.
- Developing a Trading Plan and sticking to it are the two main ingredients of trading discipline.
- A trading plan defines what is supposed to be done, why, when, and how. It covers your trader personality, personal expectations, risk management rules, and trading system.
- A common and effective saying: "Plan a trade, and trade a plan."
- Trading plans can involve any level of risk and accomplish many different investment objectives.
- Good trading plans will also provide guidance on trading strategies for stop-losses. Diversification and flexibility are important factors to consider.

The difference between making money and losing money can be as simple as trading with a plan or trading without one. Trading Plan is a systematic method for screening and evaluating coins, determining the amount of risk that is or should be taken, and formulating short and long-term investment objectives. A successful trading plan will also involve details like the type of trading system to be used. Most plans require the use of various types of technical analysis tools.

A trading plan is an organized approach to executing a trading system that you've developed based on your market analysis and outlook, while factoring in risk management and personal psychology.

Don't follow someone else's trading advice blindly. Make a plan for yourself. Note that no matter how good your trading plan is, it won't work if you don't follow it. Developing a trading plan and sticking to it are the two main ingredients of trading discipline. A trading plan defines what is supposed to be done, why, when, and how. It covers your trader personality, personal expectations, risk management rules, and trading system(s).

Trading plans can involve any level of risk and accomplish many different investment objectives. Good trading plans will also provide guidance on trading strategies for stop-losses. Diversification and flexibility are other important factors to consider.

## HOW TO MAKE A PLAN?

- Decide what type of Trader you are
- Determine the price, market and coins to trade
- Identify your market indicators, time interval, trade filters and strategies
- Decide how to enter and manage positions
  - Set Entry points
  - Set Exit points
- Decide why you want to trade and how much
  - Set Risk Levels
  - Set Goals
- Test your trading plan, perform post-mortem and then improvise

Now, see how you can make a trading plan. What you have to do to make a trade plan?

First thing that you have to decide is what type of a trader you are. Then determine the price, market and the coins that you want to trade. Identify your market indicators, the time interval for the time-frame, trade filters and strategies that you will need while trading.

After that, go for the entry and the exit points. A typical entry rule could be worded like this: "If signal A fires and there is a minimum target at least three times as great as my stop loss and we are at support, then buy X coins or tokens here."

Most traders make the mistake of concentrating 90% or more of their efforts in looking for buy signals, but pay very little attention to when and where to exit. Many traders cannot sell if they are down because they don't want to take a loss. Get over it or you will not make it as a trader. If your stop gets hit, it means you were wrong. Don't take it personally. Professional traders lose more trades than they win, but by managing money and limiting losses, they still end up making profits.

Exits are far more important than entries.


Then, decide why you want to trade and how much, for that you have to set risk levels and set goals.

Test your trading plan, perform post-mortem of the trading plan and then improvise it.

The bottom line is successful paper trading does not guarantee that you will have success when you begin trading real money and emotions come into play. But successful paper trading does give the trader a confidence that the system they are going to use actually works. Deciding on a system is less important than gaining enough skill so that you are able to make trades without second guessing or doubting the decision.

There is no way to guarantee that a trade will make money. The trader's chances are based on their skill and system of winning and losing. There is no such thing as winning without losing. Professional traders know before they enter a trade that the odds are in their favor or they wouldn't be there. By letting their profits ride and cutting losses short, a trader may lose some battles, but they will win the war. Most traders and investors do the opposite, which is why they never make money.

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## TRADING BREAKOUTS

- A breakout occurs when price clears a critical level on your chart. These levels could be a trend line, support, resistance, or a key Fibonacci level.
- Buy when the price breaks higher, or sell when the price breaks lower. Sometimes this approach works, but often it won't.
- Once the coin trades beyond the price barrier, volatility tends to increase and prices usually trend in the breakout's direction.
- Trading breakouts are most commonly used entry points when trading the markets and the starting point for major price trends.
- Here's three better ways to trade breakouts:
  - **Avoid False breakouts:** To determine the difference between a breakout and a "fake out", it is a good idea to wait for confirmation.
  - **Analyze and Anticipate for Lower Risk Trades**
  - **Focus on Patterns like flags or triangles that people don't see**

Trading breakouts, a breakout occurs when price clears a critical level on your chart. These levels could be a trend line, support, resistance, or a key Fibonacci level.

It is advisable to buy when the price breaks higher, or sell when the price breaks lower. Sometimes this approach works, but often it won't. Once the coin trades beyond the price barrier, volatility tends to increase and prices usually trend in the breakout's direction. Trading breakouts are most commonly used entry points when trading the markets and the starting point for major price trends.

Three better ways to trade breakouts are:

**Avoid false breakouts:** It means you have to determine the difference between a breakout and a "fake out", so it is a good idea to wait for confirmation first.

**Analyze and anticipate for lower risk trades.**

**Focus on unusual patterns like flags or triangles that people generally don't see.**

## STEPS TO FOLLOW

- Identify the Cryptocurrency or token
- Wait For the Breakout
- Set a reasonable objective
- Allow the coin to retest
- Know when your trade/pattern has failed
- Be patient
- Exit at your Target

Here are a few steps that you should follow to spot trading breakouts.

- Identify the Cryptocurrency or the token
- Wait for the breakout
- Set a reasonable objective
- Allow the coin to retest
- Know when your trade/pattern has failed
- Be patient
- Exit at your target

# CHAPTER 17

## Predicting the Markets



In this chapter we will see how you can analyze or predict the market. What are all those key sources of information that will help you to make market analysis?

## FUNDAMENTAL ANALYSIS

- Fundamental analysis is the evaluation of economic, financial and other key variables, known as fundamentals, to determine a currency's true value.
- While there are many different methods for evaluating the price of Cryptocurrencies, fundamental analysis may be the most integral for figuring out its true value.
- Given the complex nature of cryptos and their underlying technology, it is even more important for everyone to engage in research to assess the viability and potential of the coins.
- A good understanding of a coin's fundamentals allows you to form your own opinions and have your own stand, which is rare in the crypto world due to its complexity.

However, some analysts criticize fundamental analysis because it reflects what a security should be worth than what its actual market price is. Relying too much on fundamental analysis, without alsAs, we have discussed in earlier chapters, there are two types of market analysis: fundamental and technical.

While there are many different methods for evaluating the price of Cryptocurrencies, fundamental analysis may be the most integral for figuring out its true value. Fundamental analysis is the evaluation of economic, financial and other key variables, known as fundamentals, to determine a currency's true value.

While there are many different methods for evaluating the price of Cryptocurrencies, fundamental analysis may be the most integral for figuring out its true value. Given the complex nature of Cryptos and their underlying technology, it is even more important for everyone to engage in research to assess the viability and potential of the coins. A good understanding of a coin's fundamentals allows you to form your own opinion and have your own stand, which is rare in the crypto world due to its complexity.

By leveraging fundamental analysis, Cryptocurrency traders can get a better sense of the Cryptocurrency's true value and get a better sense of whether it's a good time to buy or sell.

o using technical analysis, could cause a trader to buy or sell at a less-than-ideal time, they said.

To manage this risk, Cryptocurrency traders can combine fundamental analysis with technical analysis. For example, a fundamental analyst might look at several indicators of demand, concluding that Cryptocurrency is under-bought, and then leverage technical analysis by reading charts to find the best entry point.

## WHAT TO CONSIDER?

- In order to assess a coin, first collect key sources of information from these:
  - Coin's White Paper
  - Coin's Slack Channel or Blog
  - Community Forums: Reddit, Bitcointalk, Steemit
  - Development roadmap
- The next step entails asking these questions to assess whether it is a good investment or not.
  - What is the purpose of the coin and does it possess any utility?
  - What are the characteristics of the coin?
  - How active is development and the main Developer/community?
  - Does investors backing it are prominent or not?
  - Is the Coin's Governance Structure Centralized or Decentralized?
  - How Much Money Have They Raised? How have they spent the money?
  - What is the Supply Structure of the Coin? How Many Coins Will There Ever Be?

In order to assess a coin, first collect key sources of information from these places:

Reading Coin's White Paper would provide you with the information of the coin's purpose and its use cases. You should always read the coin's white paper before investing. The drawback is that it can get very technical, given the use of technical jargon and concepts that are hard for an average Joe to comprehend. Then explore coin's slack channel or blog which will keep you updated with the most recent proceedings of the coin. This represents the official and main channel of communication of the core development team. Join their slack channel and view the interaction of the development team with the community. Ask questions to get more information on the coin. You should also follow the updates given by the developers in their official blog.

You can also follow community forums like Reddit, Bitcointalk or Steemit for getting all the news related to the coin. Also consider checking the development roadmap of the project as it will help you in accessing what all developments they have made and what are the future milestones of that project.

The next step entails asking these questions to assess whether it is a good investment or not. What is the purpose of the coin and does it possess any utility? What are the characteristics of the coin?

How active is development and the main developer/community? Generally, an active Cryptocurrency Github gives info regarding what is going on with the project and can tell you exactly what features are being implemented.

Does investors backing it are prominent or not?

Is the coin's governance structure centralized or decentralized?

How much money have they raised? How have they spent the money?

What is the supply structure of the coin? How many coins will there ever be?

All these questions would provide you details for making fundamental analysis.

## TECHNICAL ANALYSIS

- Technical analysis considers the history of a coin with price charts and trading volumes, no matter what the coin or project does.
- It can be used to calculate risks, and to figure out statistically where to set buy and sell orders to limit losses and maximize profits.
- The unique characteristics of the cryptocurrency markets have made technical analysis and charting invaluable tools in helping to predict direction, momentum, and support & resistance.

Crypto traders have several tools to assess the Cryptocurrency market. One of them is an approach known as Technical Analysis. Using this method, traders can get a better understanding of the market sentiment and isolate significant trends in the market. This data can be used to make more educated predictions and wiser trades.

Tech analysis considers the history of a coin with price charts and trading volumes, no matter what the coin or project does. As opposed to technical analysis, fundamental analysis is more focused on establishing if a coin is overvalued or undervalued. It can be used to calculate risks, and to figure out statistically where to set buy and sell orders to limit losses and maximize profits.

The unique characteristics of the Cryptocurrency markets have made technical analysis and charting invaluable tools in helping to predict direction, momentum, and support and resistance.

## TECHNICAL ANALYSIS

- The information is “charted” to help give a visual representation of what trends have occurred and what trends can be expected.
- The core ideas here being:
  - What has happened in the past can give us an idea of what will happen in the future.
  - The next wave of investors will tend to follow the trends of the last wave.
  - Human behavior in markets is somewhat predictable.
  - And therefore, studying factors like past volume and price trends along side the current volume and price, can tell us about future volume and price trends.

Technical analysis (the analysis of historic price trends) can be described as a different school of thought than fundamental analysis (the analysis of value based on fundamentals).

Technical analysis is centered on predicting short-term, medium-term, and long-term trends based on factors like price movement and volume (current and historic).

That data is then used alongside longstanding analysis techniques that look at price movements over time to detect patterns like Moving Averages (MA) and the Relative Strength Index (RSI).

This information is then “charted” to help give a visual representation of what trends have occurred and what trends can be expected.

The core ideas being:

What has happened in the past can give us an idea of what will happen in the future. The next wave of investors will tend to follow the trends of the last wave. Human behavior in markets is somewhat predictable. And therefore, studying factors like past volume and price trends alongside the current volume and price, can tell us about future volume and price trends.

## WHAT TO CONSIDER?

- Technical analysis is based on:
  - Pricing details (Ask Price, Bid Price, Last price)
  - Price Movements and Past trading activity
  - Supply and Demand
  - Market Psychology
  - Trading Volume

Now, let's see on what parameters technical analysis is based on.

For making technical analysis, look for these parameters: Pricing details like Ask Price, Bid Price or the Last price, price movements and past trading activity of the token or the coin. Supply/Demand, and market psychology that runs the trading market.

Trading volume should also be considered as it would determine the faith of the people over a particular coin or token.

## WHAT TO DO?

- Technical analysis (the analysis of historic price trends) can be described as a different school of thought than Fundamental Analysis (the analysis of value based on fundamentals).
- Technical analysis is by no means a guarantee for predicting future events; it should be used alongside other market pricing factors.
- Also, relying too much on fundamental analysis, without also using technical analysis, could cause a trader to buy or sell at a less-than-ideal time.
- To manage this risk, traders can combine fundamental analysis with technical analysis.
- A trader might use technical analysis to determine that it's a good time to sell, and then leverage fundamental analysis to confirm this view by looking at key drivers of demand.

Here are some final points to discuss before concluding the market analysis.

Please note two important things:

We are by no ways an expert in technical analysis, and are just sharing some basics learnt along the way which has helped in our trading decisions.

Technical analysis is by no means a guarantee for predicting future events; it should be used alongside other market pricing factors.

Also, relying too much on fundamental analysis, without using technical analysis, can cause a trader to buy or sell at a less-than-ideal time. So to manage this risk, traders can combine fundamental analysis with technical analysis.

A trader might use technical analysis to determine that it's a good time to sell, and then leverage fundamental analysis to confirm this view by looking at key drivers of demand.

# CHAPTER 18

## Trading Rules



Till now we have provided you with all the information that's required for being a trader. But before winding up this section, let's have a look at the do's and the don'ts of Crypto trading. As you know it is a highly risky business, if you don't play the game by following these trading rules then you will get into a whole lot of trouble.

## TRADING RULES

- Trading is not a strategy to get rich quickly
- One must trade very seriously, as it is a serious business
- Always ask, "Is this stock moving because the overall market is moving, or it is moving because it has a unique fundamental catalyst?"
- Risk management is very crucial to find low-risk entries with a high-potential reward
- Experienced traders jump out at the right time, take their profit and get out
- Indicators only indicate, they should not be allowed to dictate
- Profitable trading does not involve emotion, so you will only lose money if you are emotional.

So, let's go through these trading rules before making any trade.

Do keep in mind that trading is not a strategy to get rich quickly it's just a game where some day you will win, but some day you will lose too. One must trade very seriously, as it is a very serious business because you can lose millions in a few seconds and after that, it's also possible that you can't recover that money ever. Always ask, "Is this stock moving because the overall market is moving, or it is moving because it has a unique fundamental catalyst?"

Risk management is very crucial to find low-risk entries with a high-potential reward, and you must always create a strategy by including more risk safety measures. Keep in mind that experienced traders jump out at the right time, take their profit and get out.

There is no point in wasting money and holding the trade just by your opinions, and we have already discussed this that your opinions don't matter in this market. So, be sensible, sense the profit, be fast in your decisions and act boldly.

It's very important to understand that indicators only indicate, they should not be allowed to dictate. Use them smartly and don't get rule over by them, use your brain also. Profitable trading does not involve emotion, so you will only lose money if you are emotional. Leave your emotions out of the game and only focus on profit and losses.

## TRADING RULES

- Never put all your eggs in one basket. Your capital should be broken into smaller lots for multiple positions at different price levels.
- Do not invest your life savings or money that may change your life drastically in the event of a loss. This rule is important mainly due to the existing level of uncertainty that still exists within this market.
- Take full advantage of available technology in order to gain maximum profit
- Understanding the market is a continuous process and requires a lot of time, concentration and effort. It is very crucial to do research and be up to date with current trends.
- Traders should keep in mind that losing, just as much as winning, is an integral part of trading. It is the cumulative gains that count.

Never put all your eggs in one basket you must follow this saying as it says quite a lot. Your capital should be broken into smaller lots for multiple positions at different price levels. Never invest your life savings or money that may change your life drastically in the event of a loss. This rule is important mainly due to the existing level of uncertainty that still exists within this market.

Always try to take full advantage of available technology in order to gain maximum profit from the crypto market. Understanding the market is a continuous process and requires a lot of time, concentration, and effort. It is very crucial to do research and be up to date with current trends.

Traders should keep in mind that losing, just as much as winning, is an integral part of trading. So never get too excited about winning a lottery and at the same time never get too low while losing, it is the cumulative gains that count. So trade continuously and always try to maximize the profit.

We hope you have gained a whole lot of information on crypto trading from this book that will help you in becoming a profitable trader. Cryptocurrencies are riding a huge wave of popularity and investment; knowledgeable traders are making a whole lot of money.

If you have missed the early bus of making money from coins like Bitcoin and Ethereum then don't lose hope, as there are a hell lot of other currencies that will raise the same in the near future. So just try to get along with those currencies.

But here's the real deal: You'll make mistakes, and you'll learn. That's the only way to be perfect in the trading game. There is always more to learn. Life is a river, don't push the river, flow with it. Learn whatever it has to teach you right now and don't worry about the past or the future. Become a perpetual student, study with humility, ruthlessly correct your own screw-ups and you just might end up with a nice pile of money when this is all said and done.



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