An Explanation of Technical Analysis & Indicators

Getting Started:

In this doc we'll be covering one of if not the most important aspects, and the backbones to trading in general - Technical/Fundamental analysis (TA/FA). Both technical & fundamental analysis are quintessential skill sets all traders alike should know, as if you don't know the basic psychology behind reading charts and patterns - you'll be completely left in the dark. Trading is quite the emotional game, filled with ups and downs, highs and lows etc. Analysis is used to give the user a rational idea of what to expect in a trade, and dim down emotions to help avoid making any rash decisions.

Why I think you need to know how to use analysis:

Other than the obvious reasons of being able to read charts and actually understand what you're doing, there's an ongoing list of reasons to learn analysis/trading in general.
Not only has trading changed my perception on many things, it's given me my idea of absolute freedom. Trading is not going anywhere, be it crypto, stocks, forex, commodities, the list continues. Even if these markets fall, there will always be new markets to replace them.

You will always be able to trade in some format, no matter what. You're your own boss, you create your own hours, work at your own pace, choose your own workspace and so forth. I'll teach my kids how to trade, and hope they teach theirs the same. It's a skill set I believe all aiming for freedom should know - and is easily learned with persistence and due diligence. The following pages show my personal favorite methods. but there's an open sea of strategies you should test and try to find what works best for you. Hopefully the following helps!

Understanding Emotions:

When new traders see an asset crash or rally - they naturally have a rush of either fear or greed. In the case of a crash, the usual immediate reaction traders have is fear, and may feel compelled to sell their holdings to sit on cash in an attempt to avoid any further loss. On the flip - traders may feel the greedy urge to buy into an asset rallying at a high price, which would most likely end off hurting you. Greed can also be found when you're in an asset that's rallying, and you end off holding on too long - losing your unrealized profits.

This is where Technical and Fundamental analysis come into play, using tools/research to make educated guesses on movements prior to them happening, i.e. selling before the asset has crashed, or buying before the asset has rallied.

Fear and greed are not easy emotions to overcome, but setting and following rules are the first step.

For investors, you should always know what you're buying, invest in the project not the price to avoid panic in the case of a pullback. Complete in depth research for projects prior to buying.

If you ever have the urge to sell during a pullback, question why you would, if nothing has changed in the project - you shouldn't be worried. If you're not sure what to look for in projects, suggest giving my Project Research document a read.

Traders should follow the basic rules of trading, having parameters/rules set prior to entering a trade and sticking to these rules to avoid becoming greedy/falling into loss. Use stop losses, set targets and don't alter these due to new emotions. Stick to your original game plan. If you're unsure of what rules you should be following, be sure to give my Basic Rules of Trading document a read - it should help!

It's important for traders/investors to remain flexible and consider experimenting from time to time, testing strategies to find what works best for them. All in all, both traders and investors should learn technical and fundamental analysis if they want to have a strong grasp of the market and the way it revolves.

What is fundamental analysis?

Fundamental analysis (FA) is the study of more direct analysis on an underlying asset/market, i.e. news, market cycles, sentiment etc. In my eyes fundamental analysis is a bit more important in crypto as we are still in an intrinsically based market, and fundamentals can easily outweigh technicals.

Crypto is relatively easily manipulated as it's still arguably in its infancy stage, and small things can still alter markets. Elon Musk's tweets in regard to BTC and Doge had a blatant positive effect on the market - the tables can easily be flipped negative if the narrative were to change. If Elon were to become against crypto, we would likely see a negative push down from retail investors - scenarios go on.

What is technical analysis?

Technical analysis (TA) comes in many facets, but revolves around the study of historical market data, including price, volume and other statistics. Using insights from market psychology, behavioral economics, and quantitative analysis, technical analysts aim to use past performance to predict future market behavior. The two most common forms of technical analysis are chart

patterns and statistical indicators. There's an endless list of different forms of TA, but it all revolves around the idea of reading patterns on charts, and using market data to predict an idea or outcome.

How does one read a chart?

Well, there are many ways - watching for and spotting simple chart patterns and trends being the most obvious. Watching these trends is a way to help you navigate the market, and make entering/exiting positions much easier, but not something to rely on. As much as using analysis can help, it is never 100% accurate - some trends/patterns are stronger than others, but there are always other fundamentals which can easily overpower TA (news, FUD, cycles etc).

TA can be used to help soothe emotions and make rational decisions, many indicators are used as confirmations - either alone or coinciding. There's an endless list of indicators/analysis, and ways to read the market in general - let's start with the basics.

Above we have a basic breakdown of Supports v Resistances - One of the more basic butt crucial aspects of technical analysis. As explained in the terms, a support is created when an asset finds a new zone New support to bounce at/on - a place we have strength at.

A resistance is the vise versa - when an asset is struggling to break through a zone, a place where the asset is weak.

The graphic details what to look out for when trying to spot a support or resistance, keep in mind - both grow stronger the longer they stand, and can as well be found as trend supports (grey lines), as shown in the above breakdown.

I personally am more of a fundamental trader but with crypto the market prices can easily be manipulated - and even the perfect analysis can be crushed. I stick to more of the basic or more used analysis trends, with crypto it comes down to people looking for the same thing. If 500,000 people are staring at the same bull flag - they'll likely act accordingly.

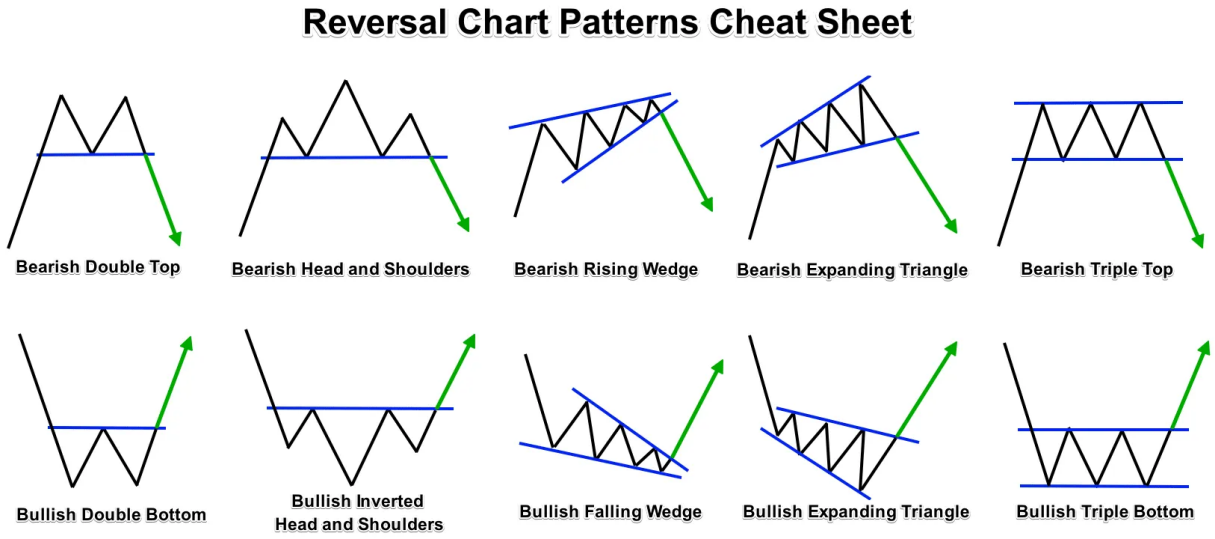
Chart Patterns & Setups:

The below images show my personal favorite technical analysis patterns and setups that I use to help determine trades.

There's truly an endless list of formations to watch out for - only the top patterns are listed below. You can use these patterns to help you enter or exit trades, and although not something to fully rely on - it's imperative that you get to know these setups, to avoid trading blind.

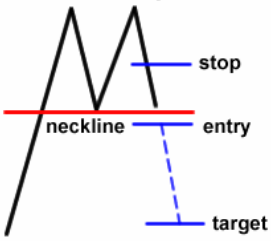
Keep in mind - time frames are crucial to all of these setups, including basic supports, resistances & trend lines.

The higher time frame used on these setups - the more accurate they are. Many can as well be flipped to bearish, i.e. bullish double bottoms can also be bearish double tops.

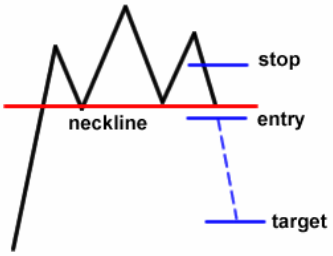


Reversal Patterns

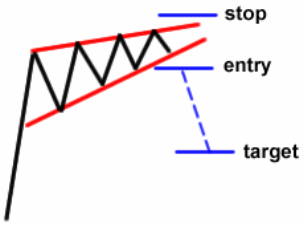
Double Top



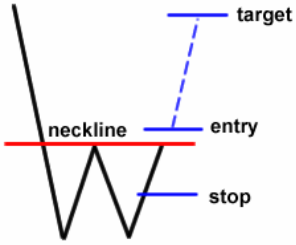
Head and Shoulders



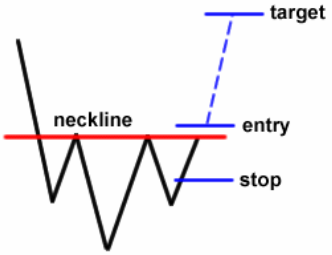
Rising Wedge



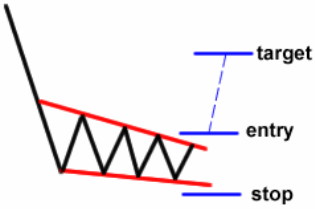
Double Bottom



Inverse Head and Shoulders

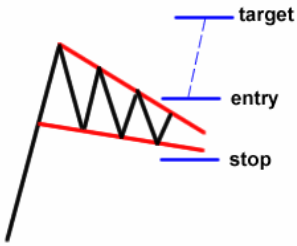


Falling Wedge

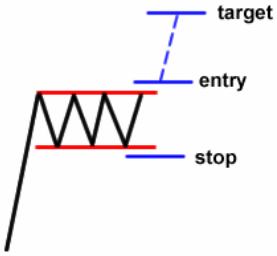


Continuation Patterns

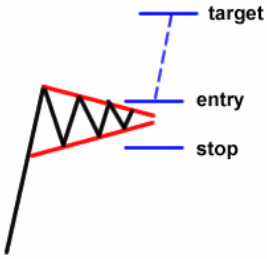
Falling Wedge



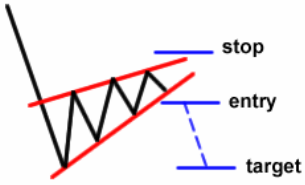
Bullish Rectangle



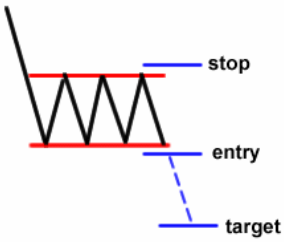
Bullish Pennant



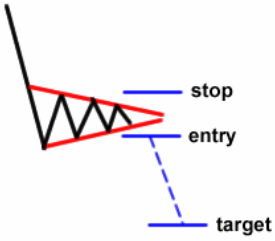
Rising Wedge



Bearish Rectangle

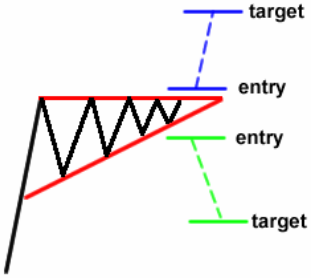


Bearish Pennant

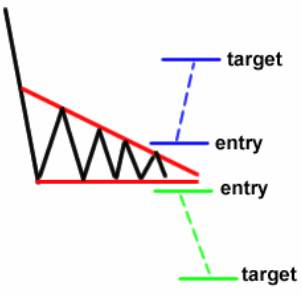


Bilateral Patterns

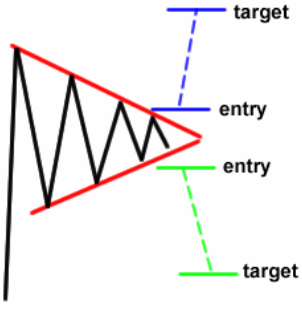
Ascending Triangle



Descending Triangle



Symmetrical Triangle



Commonly used Indicators:

Typically, traders who use TA use a variety of different indicators and metrics to try and determine market trends. It's best to use multiple at once as many traders do, to using them separately for multiple confirmations. The following list shows my personal top nine favorite indicators, used in my own trades.

CyAlgo Trading Indicator (CYA):

CYA highlights buy and sell opportunities, as well as gives automatic Supports and resistances/trend lines, and an automatic take profit/stop system to help simplify things.

RSI (Relative Strength Indicator):

Developed around 40 years ago by Welles Wilder, the RSI indicator helps traders identify when an asset's price is too far from its 'true' value. Therefore, allowing a trader to take advantage before the market corrects itself. RSI is a leading Indicator, which has a fixed oscillating range of O - 100. RSI below 30 is considered to be oversold - above 70 overbought. Trading with RSI standalone is not the best strategy, most traders use RSI to find divergence to find the best possible entry.

Calculation of RSI: $RSI = 100 - 100/(1 + RS)$

Where RS = Average Gain/Loss

Why should you know the calculation of RSI?
As technical traders - what's going on behind the chart doesn't really matter, but trading systems developers must know these things to make something from that or modify it.

To calculate average gain/loss, we have to first average out gain or loss. Assuming the default value of RSI is 14, which is obvious everywhere.

First Average Gain = the total sum of gain in the previous 14 periods 114
Frist Average Loss= the total sum of loss in the previous 14 periods 114

As of now, we've calculated first gains/losses, then we have to calculate the Average Gain and Average Loss.

Average Gain= {(Previous Average Gain * 13) + Current Average Gain} 114
Average Loss= {(Previous Average Loss * 13) + Current Average Loss} 114

Overbought/Oversold Condition:

Note: Taking entry-exit using standalone RSI is not a viable strategy meanwhile combining RSI with other strategies and price action techniques will provide better results. Always trade indicators wisely with proper risk management or else your trades will be considered at high risk.

What is RSI Divergence:

With RSI divergence, the relative strength index of a specific asset shows lower highs when the price uptrend hits higher highs. Conversely, when the price is trending downward, it hits Lower Lows with divergence while the RSI hits Higher Lows. While both indicators are either traveling upward or downward simultaneously, the RSI is beginning to diverge from the asset's price.

Divergence indicates that the current price trend is flagging, which provides insight into whether it's time to make a move to buy or sell the underlying asset. When an indicator disagrees with the price, this lack of synchronicity indicates a likely change with the chart.

A hidden bullish divergence tends to indicate the beginning of an uptrend. You'll notice on basic trend lines that the RSI indicator makes a Lower Low than the assets price, which hits a Higher Low. Conversely, a hidden bearish divergence happens when an asset is trending downward.

This trend will likely continue when you notice that the RSI hits a Higher High then the Lower High of the price. Either of these can help you make a decision on a trade .

There are two types of divergence:

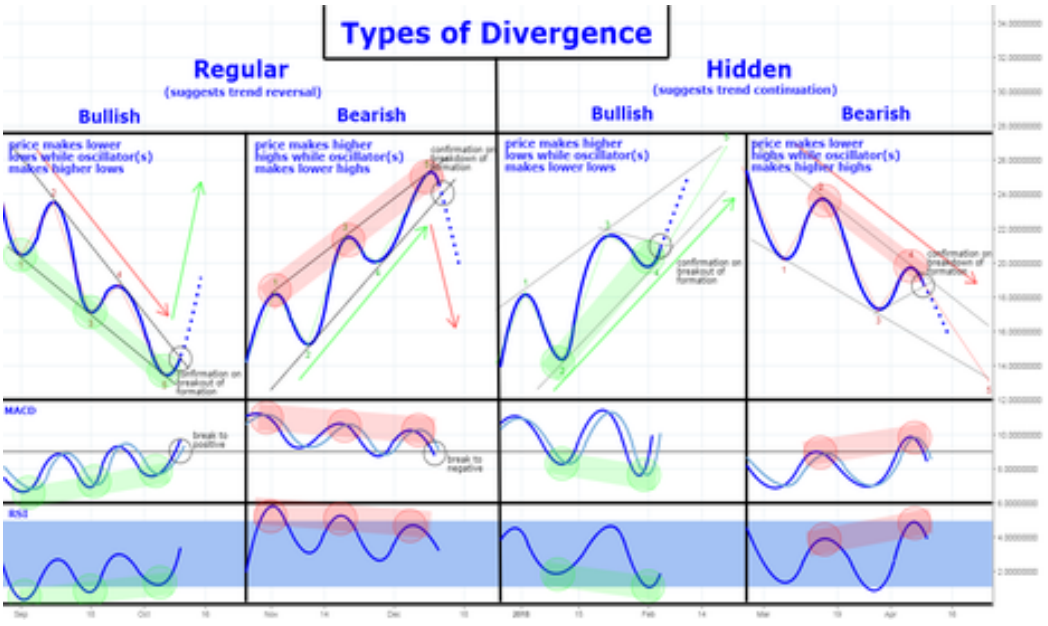
Bullish Divergence:

A bullish divergence occurs when the price is making continuous Lower Lows while showing respect to RSI making a Higher High.

Remember to trade divergence when you see market-making swings with high momentum - otherwise sometimes you may encounter false divergence.

Bearish Divergence:

A bearish divergence occurs when the market is making a Higher High's with respect to RSI making a Lower Low.

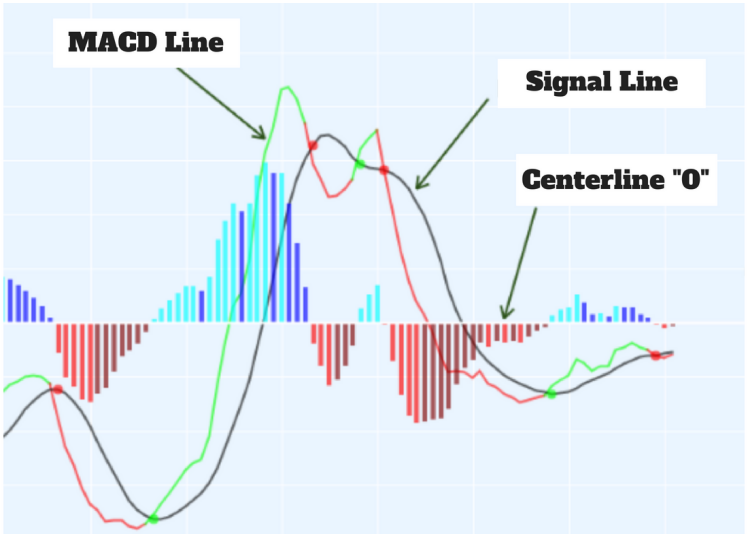


As you can see the price is making a Lower Low while RSI is going down, thus creating a Higher High. The price of the asset is making a higher high with respect to RSI making a lower low.

Moving Average Convergence Divergence (MACD):

Invented in 1979 by Gerald Appel - MACD is one of the more popular indicators due to its simplicity and its ability to provide strong confirmations. The MACD represents a trend following indicator that highlights whether the short-term price momentum is moving in the same direction as the long-term price momentum, and in cases where it's not, then it's used to determine if a trend change is near.

The MACD consists of four components; MACD line, signal line, zero line and histogram.



Calculation:

MACO Line = 12 periods EMA* - period 26 EMA*

Exponential Moving Average

Single Line = 9 period EMA (Exponential Moving Average)
Histogram = the difference MACO Line and Single Line

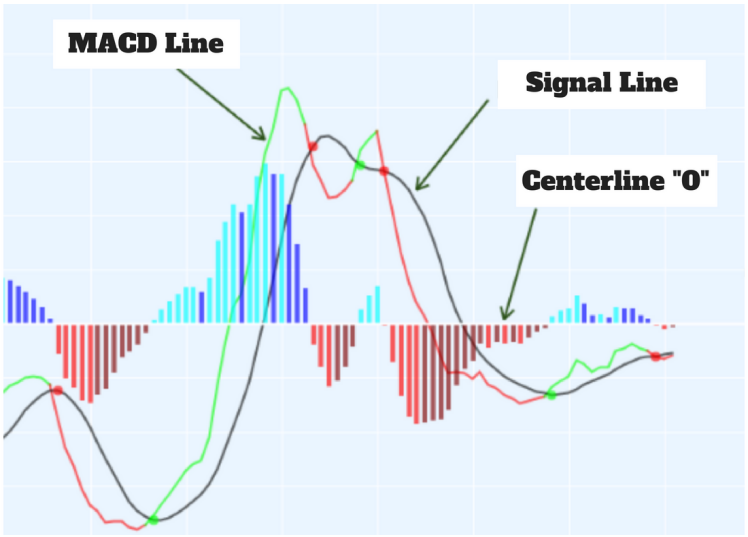
How to use MACD:

Usually traders would use its crossovers for buys/sells or entries/exits -but standalone using MACD is not the best idea.

A separate strategy derived from this or a separate indicator is required, or it won't be ideal. When the MACD line crosses over signal Line below the histogram - it's then considered a buy signal. When the signal line crosses below the MACD line above the Histogram, it's then a sell signal.

Note: Crossovers may occur anywhere and anytime - which can sometimes lead to a false signal.

As you can see, we may get some beautiful swings with this but not always work and give false signals combined with some sort of strategy to increase accuracy.



Stochastic Oscillator:

Developed in the late 1950s by George Lane - the Stochastic Oscillator shows momentum by comparing the closing price of an asset with its high-low range over a given time frame. The good thing is, this indicator works excellently no matter the current volatility.

Calculation:

Slow %K = 100 [Sum of the (C - L 14) for the %K Slowing Period I Sum of the (H14 -L 14) for the %K Slowing Period]

Slow %D = SMA of Slow %K

Where C is Latest Close, L14 is Lowest low for the last 14 periods, H14 is highest high for the same 14 periods, and %K Slowing Period is 3.

However, there isn't much need to worry about the calculation due to chart software and trading platforms processing the formula and providing you with a stochastic oscillator.

All you need is the basic knowledge of how to use the oscillator and make the most use of your efforts.

How use Stochastic Oscillator:

Here as well - this indicator has an overbought and oversold condition at 80 and 20 respectively. Traders use the crossover of %D and %K to buy/sell. If %D crosses over %K above the 80 levels then it's a sell signal and if %K crossover %D below 20 levels then it's a buy call. Using standalone is not a good strategy for trading because indicators provide many false signals throughout the sessions.

What are Moving Averages (MA)?

Development of the Moving Average dates back to 1901, although its name was applied to it later. Moving Average is a very simple and famous indicator used by the majority of the traders in their technical analysis. MA uses the previous price data to average or smooth out the price, an average is then calculated over a specific period of time.

Some traders use MA to find trend direction and for both entry and exits, it also helps many cut the noise from the market and smooth out the price to understand the current trend.

There are various types of Moving Average:

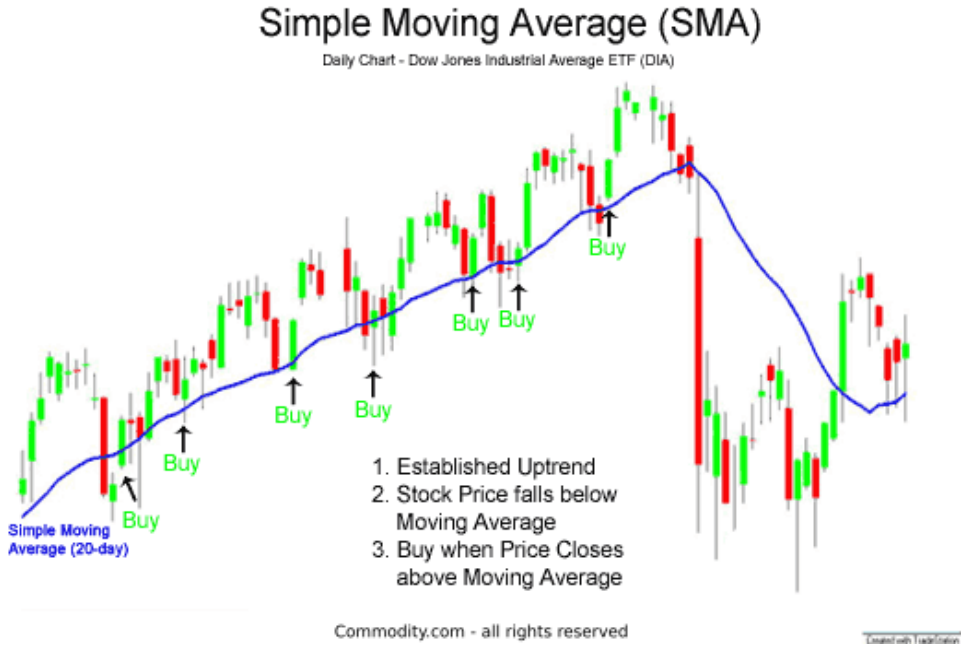
Simple Moving Average (SMA):

SMA stands for the Simple Moving Average known as Moving Average in general - which calculates an average of the price over the given period.

Calculation:

$$SMA = (P1 + P2 + P3 + \ldots + Pn) / n$$

You can use SMA to find most basic trends, many use a combination of moving averages, whichever suits you. Most traders use a 50 or 100 or 200-period moving average on 4H to 1D time frame for trend direction. A few traders use Moving Average crossovers to enter and exit the trade and price often bounces from the MA line.



As you see the asset is in an uptrend, knowing the longer time frame trends and entry/exits in smaller frames will provide some good trade opportunities. Many use it for swings, or if you've missed any trade then you can enter while the price is bouncing/respecting an MA.

Exponential Moving Average (EMA):

EMA is one of the more widely used aspects of analysis - and is frankly a bit better than SMA as it gives more weightage to recent price by using the most recent data - the calculation is a little bit different in it.

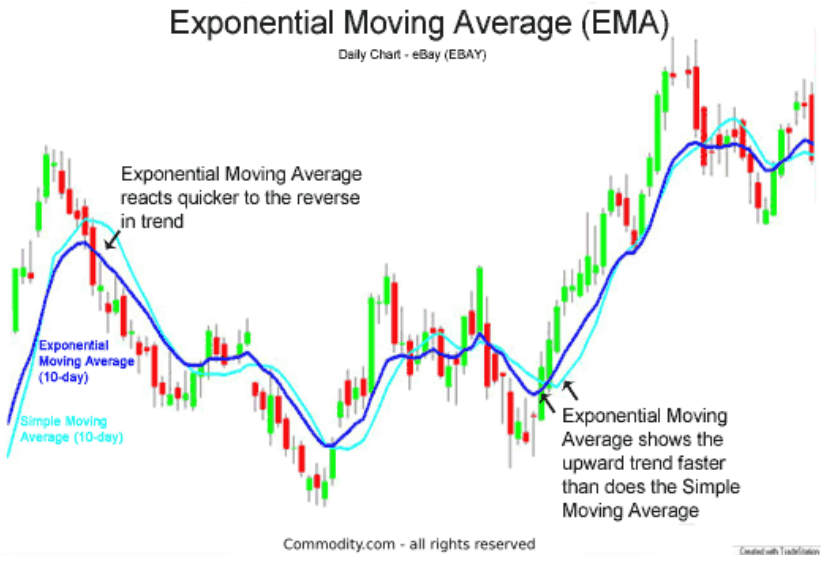
Calculation:

Multiplier = [21 (Period of EMA + 1)]
EMA = Closed Price x Multiplier + EMA (Previous Day) x (1 - Multiplier)

Where, closed price is closed price of the current candle Multiplier is the smoothing factor for EMA

The EMA is a moving average that places a greater weight and significance on the most recent data points, and like all moving averages, this technical indicator is used to produce buy and sell signals based on crossovers and divergences from the historical average. Traders often use several different EMA lengths, such as 10-day, SO-day, and 200-day moving averages.

EMA tends to give much more entries than SMA (Simple Moving Average), if we spot the trend direction we can catch many more swings. You can use crossovers here as well.



Smoothed Moving Average (SMMA):

Smoothed Moving Average is just an addition of exponential moving average and simple moving average.

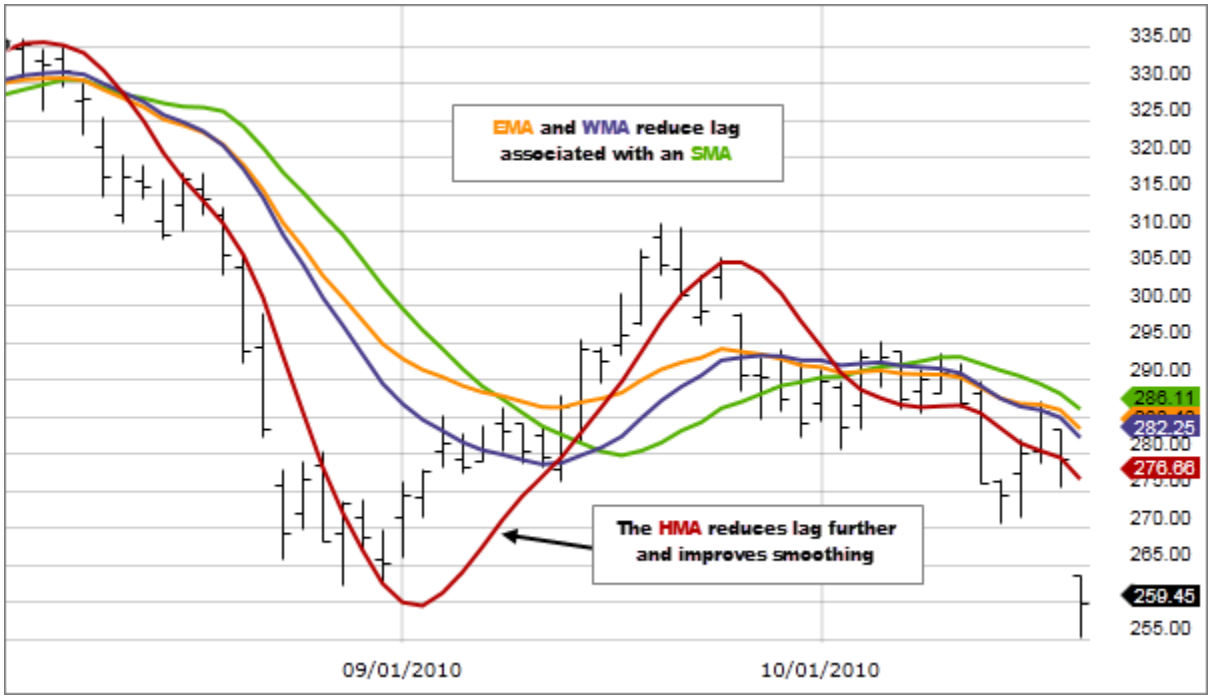
It gives equal weightage to the current price as the previous prices and takes all available price data into account.

Calculation:

SMMA of the candle or SMMA 1 = SMA(n) / n
SMMA = [(((Current SMMA - 1 J x n J - Current SMMA + Current Close Price) / n]

When n is the time period

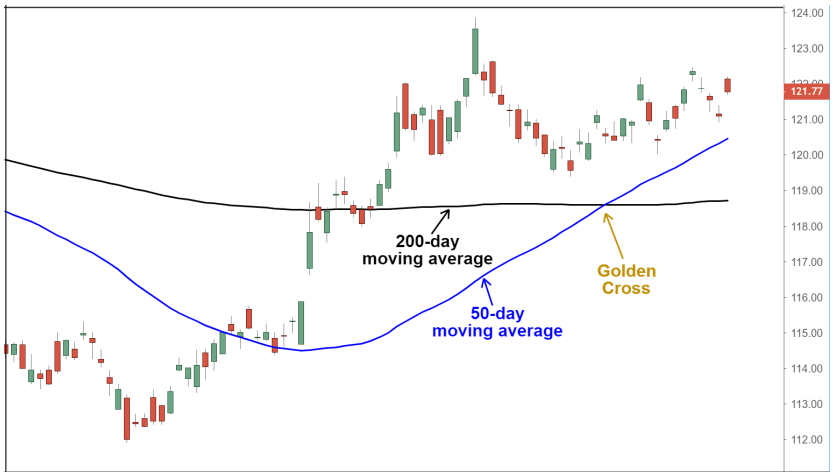
You can also use a combination of SMMA, EMA, and SMA to build a perfect strategy. Although MA is a lagging Indicator based on the last price, we can still use it to find potential entries. There are many more Moving Averages but not widely used, i.e., LWMA (Linearly Weighted Moving Average), VWMA (Volume Weighted Moving Average), HMA (Hull Moving Average), VMA (Variable Moving Average) and so forth.



Golden Crossover:

When a short period MA {Moving Average, can be SMA or EMA) breaks above, then a longer period MA is known as Golden Crossover. Traders look for Golden Crossovers usually to indicate a long-term uptrend.

Moving Average can be SO, 100 or 100, 200 or SO, 200 .



Death Crossover:

The opposite of Golden Crossover, it's used to give an indication of a potential long-term downtrend. Values are the same as Golden Crossover has. False crossovers may come at some point due to a lag within the indicator. The death cross has indicated many major selloffs and has proven to be a reliable predictor of some of the most severe bear markets of the past century, including the 1929, 1938, 1974, and 2008 crashes.

A golden cross and a death cross are exact opposites. A golden cross indicates a long-term bull market going forward, while a death cross signals a long-term bear market. Both refer to the solid confirmation of a long-term trend by the occurrence of a short-term moving average crossing over a major long-term moving average.

Bollinger Bands (BB):

What is the Bollinger Band?

Created in the 1980s by John Bollinger, Bollinger Bands work as an oscillator measurer, indicating whether the market has a high or low volatility or even if there are overbought and oversold conditions.

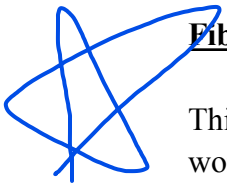
The main idea behind this Bollinger Bands is to show how prices are spread across an average value. Bollinger Bands are composed of an upper band, a moving average line, and a lower band. The two outer bands react to market price action. They expand (move away from the middle band) when volatility is high and contract (move closer to the middle band) when volatility is low.

Standard Bollinger Band formulas set the centerline as a 20-day simple moving average (SMA). As for the top and bottom bands, these are calculated based on market volatility

Calculation:
Assuming, the default value is 20

Upper Band = 20 Period SMA (Simple Moving Average) + (Previous 20 Standard Deviation * 2)
Lower Band = 20 Period SMA (Simple Moving Average) - (Previous 20 Standard Deviation * 2)
Middle Band= 20 Period SMA (Simple Moving Average)

According to this setting, at least 85% of the price data moves in between the upper and lower bands, but can be adjusted depending on different trading strategies and needs.



Fibonacci Retracement:

This indicator predicts potential support and resistance levels for an asset's price action. The word comes from the Fibonacci sequence brought about by Leonardo Pisa, an 11th-century mathematician.

The Fib sequence is derived from a sum of the preceding two numbers, with each number roughly 1.618 times greater than the one that came before it. The result is a value known as "phi" or the "golden ratio," which has a fascinating relationship with almost everything in nature.

The phenomenon extends to trading when used to analyze an asset's price action. This allows the user to derive supports and resistances in a trend in which the price is likely to respect.

This is achieved by dividing the peak to trough distance or trough to peak distance by the phi and other ratios in the sequence. Some other crucial ratios include 0.382 and 0.236.

After watching for some time, you might realize that price reacts to these levels regularly; thus, it can offer you optimal entry and exit points. However, before using indicators such as this one to identify potential support or resistance levels, you must be able to locate a Lower high and Lower low.

<u>How to draw Fibonacci Levels:</u>

First you have to find a strong trend to be biased in a particular direction. Now analyze the same trend in a lower time frame, in this case our trend is down so we draw from Lower High to low and mark up the potential continuation zones matching with Fib lines.

You can see the market retraced back to 0.618 (61.8°/o) and a beautiful fall from there, meanwhile there is also a resistance level that has been tested multiple times.

On Balance Volume (OBV):

Developed by Joseph Granville and shown in his 1963 book Granville's New Key to Stock Market Profits. OBV A momentum indicator that uses volume flow to predict changes in stock price.

Granville believed that volume was the key force behind markets and designed OBV to project when major moves in the markets would occur based on volume changes. In his book, he described the predictions generated by OBV as "a spring being wound tightly." He believed that when volume increases sharply without a significant change in the stock's price, the price will jump upward or fall down.

The idea behind the OBV indicator is whenever the daily price of bitcoin goes up, Then OBV increases by the bitcoin volume amount accordingly.

In contrast, whenever the daily price of bitcoin goes down, OBV decreases by the bitcoin volume amount.

In other words, if the closing price of the bitcoin doesn't change in one day, The OBV is going to show the last day's volume amount.

The On Balance Volume indicator can help you to identify a price trend. When changes in price and volume have a positive correlation, we can simply confirm a trend.
In this situation, increasing in volume would cause the price to go higher, and volume decreasing could cause the price to go lower.

Using OBV:
There are a few ways to use OBV, but these are the main two approaches I personally use.

• When the price chart has a clear uptrend or downtrend, you can use the OBV indicator to confirm the trend continuation.
• When the price trend and the OBV trend had opposite directions, then you can expect a price reversal.

Confirmations:
The On Balance Volume indicator can help you to identify a price trend. When changes in price and volume have a positive correlation, we can simply confirm a trend.
In this situation, increasing in volume would cause the price to go higher, and volume decreasing could cause the price to go lower.

The image below shows how OBV confirmed the asset's price movement. As it's obvious in the image, when volume flow is incremental, price follows it and causes Bitcoin price to mark a new all-time high.

Spotting Divergences:

When the price of any asset reaches its support/resistance levels, Then price reacts strongly to it.

In this example, bitcoin price reached a critical resistance level, and as it went higher, OBV indicated lower volume. In fact, OBV clearly showed the price reversal of bitcoin before the price fell, in other words when the price went higher bulls lost their power and bears took control of the price.

lchimoku Cloud:

The lchimoku Cloud indicator consists of five lines, with each line displaying averages over specific periods, with a trader being able to determine how long they need to be. They represent some of the most visual Bitcoin indicators, and this makes them easy to interpret. Also, they clearly define support and resistance, identify trend direction, gauge momentum, and provide several trading signals.

When two lines cross, the area that is between them is shaded in, therefore forming a "cloud." So, when the price is above the cloud, it means the trend is up, and if the price is below the cloud, then the trend is down. If you find the cloud itself moving in the direction the price is moving; then the trend is quite strong.

How to Trade lchimoku Cloud:

It's not very hard to understand the relation between the price and the lchimoku cloud. However, The bullish or bearish entry signals depend on a few specific rules.
Meanwhile, whenever you want to use lchimoku cloud trading system you must consider these general rules:

• Green lchimoku cloud is a bullish sign
• If candlesticks are above the lchimoku cloud, it means bullish momentum
• If lchimoku cloud is below the candlesticks, it acts as a support
• Red lchimoku cloud is a bearish sign
• If candlesticks are below the lchimoku cloud, it means bearish momentum
• If lchimoku cloud is above the candlesticks, it acts as a resistance

• If the price is ranging in the cloud,
• it means no trading zone

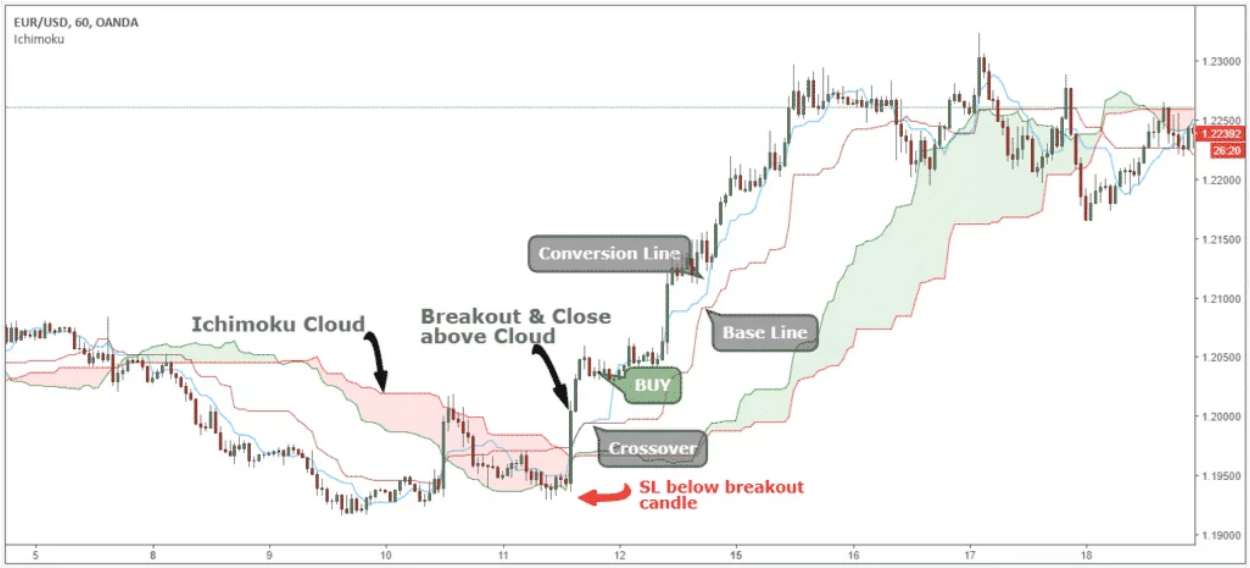


Chart reading and Candlesticks:

What is a Chart?

A chart is a historical representation of data in which data is represented in various ways. Data representation can vary with different time frames. There are many ways of data representation, you can represent the same data using a line or a chart or pie chart with anyone that you like and understands better.

What is a 'Time frame' In trading?

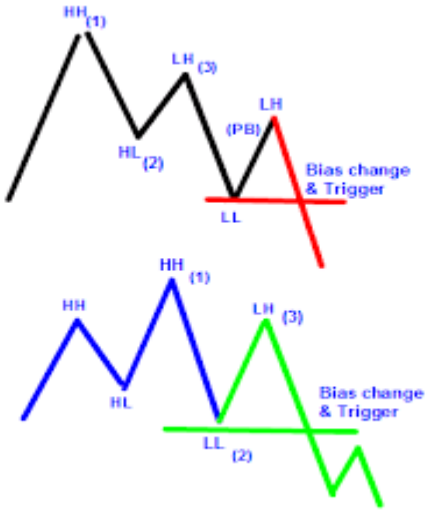
Data is represented in multiple periods of time, the majority of platforms give a time frame starting from 1 second to 1 month for premium members, for free users it's usually from 1 min to 1 month. There are different types of traders in every market like short term, midterm, and long term traders. Short-term traders use 5 min to 1-hour timeframe charts, for the most part. The midterm traders use 4-hour to 1-day timeframe charts for trading. The long-term traders use mostly weekly and monthly time frame charts etc.

What's the real difference between bullish and bearish in the market?

The bullish word itself gives an aggressive meaning, and although in the financial market this term is used it refers to market sentiment when an asset's price is in a constant uptrend, making higher highs. Bearish when an asset's price is in a downtrend, or make lower lows.

What is higher high (HH), higher low (HL), lower high (LH) and lower low (LL)?
We all know when the market is trending it neither moves straight up or down unless a piece of fundamental news is released.

When an asset is bullish it moves to make Higher High (HH) and Higher Low (HL). In essence, when the prices move upwards and it makes a correction slightly lower and makes a new higher high (HH). Same as it is, when the security is bearish it moves Lower low (LL) and Lower High (LH). We can say that price moves downwards and makes a slightly high move and follows the major trend of lower low (LL).



Let's talk about some of the more popular of charts used in trading:

Candlestick Chart:

The Candlestick chart is most popular/most widely used for trading. Each and every platform has this candlestick chart. This candlestick was developed by a Japanese rice merchant in the late 1700s to track the price action of rice futures. Often this candlestick is also called "Japanese Candlestick". This candlestick consists of four prices. Prices indicate open, high, low, and close (OHLC).

Heikin Ashi (HA):

Are a side branch of Japanese candlestick. It uses the data of Japanese candlestick (i.e., OHLC) and is then used to plot Heikin Ashi candles. My personal favorite due to its simplicity.

Calculation:
Open = (open of previous bar + close of previous bar)/2.
Close = (open + high + low + close)/4.
High = the maximum value from the high, open, or close of the current period.
Low = the minimum value from the low, open, or close of the current period

Line Chart:

A Line chart is the easiest and the simplest trading chart in trading. This chart is plotted by the close price of the security under a given timeframe. This chart is quite easy to trade, but has some limitations because it does not provide proper data for traders who have a strategy based upon price and or something like that.

Bar Chart:

A bar chart consists of OHLC price and a stick which has a small stick on the left and right on that stick which indicates open and close price respectively.

There's a much longer list of different chart styles - such as Renko, Kagi, Line Break, Point & Figure, etc. but not used quite as often.

History of the Candlestick

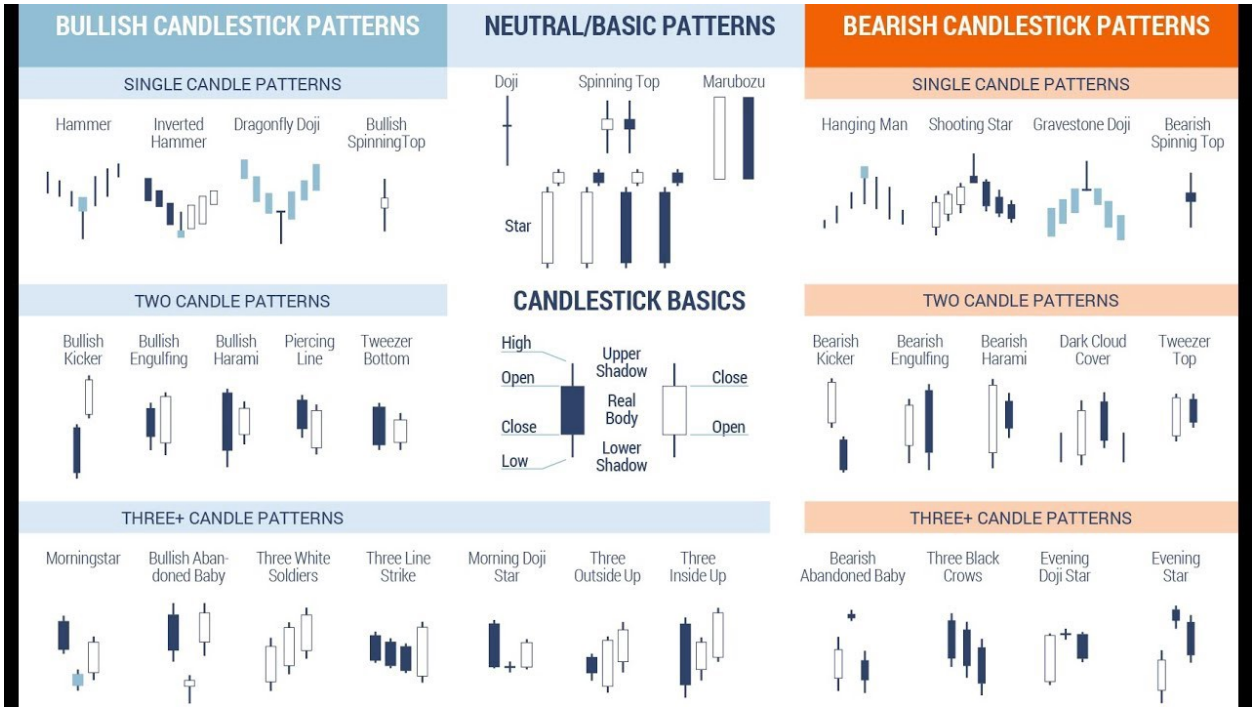
In the early around 17th century, Munehisa Homma, a rice trader, created the idea of candlesticks for understanding the fluctuation of price. A man named Steve Nison used this technique to understand Dow Jones and NYSE after 1850 and published his book "Japanese Candlestick Chart Techniques".

What is a Candlestick?

A candlestick is a visual representation of price, specifically to display Open, High, Low, and Close (OHLC). A candlestick has four prices I.e., OHLC prices, which is used to form bars/body of the candlestick. A candlestick is also like a bar chart but has a body between open and close price. A candlestick can be green or red depending on opening and closing price or more specifically it can be bullish or beari.sh.

What’s the difference between bullish and bearish candlesticks?

When the closing price is greater than the opening price then it should be considered a bullish candlestick. When the open price is less than the closing price then it's a bearish candlestick. Candlesticks come in many different variations, the following explains some of the differences.



What is a Doji?

A Doji is a price reversal candlestick that has the same opening and closing. This candle signifies indecision in the market between buyers and sellers. This candle mostly forms at the end of the downtrend or uptrend and looks like a plus sign. It has small decent wicks with the same open and closing price or negligible body.

There are different types of Doji:

• Long Legged Doji:

It's a candle that mirrors Doji with much longer wicks. Mostly appears in a trend - indicates strong indecision.

• Gravestone Doji:

This Doji indicates that neither buyers or sellers are active - it's a bearish reversal candlestick. Between the opening and closing of this candle, buyers pushed the market upside but afterward

sellers take over the market, closing the price at the same opening. This type of Doji often found at the uptrend, usually nearby resistance indicating selling pressure.

• Dragonfly Doji:

This type of Doji is a bullish reversal candlestick where sellers push the market down but buyers take over the market and close at the same opening price. This type of Doji is often found at a downtrend, usually at the support level of the market indicating buying pressure.

• Engulfing Candlestick:

Engulfing is a trend reversal candlestick which consists of two candles, in which the end candle (2nd candle) fully engulfs the entire body of the 1st candle. Engulfing candles can differ in the form whether it's an uptrend or downtrend. This type of candlestick has 2 types:

• Bullish Engulfing:

Bullish Engulfing candlesticks found in a downtrend indicate the beginning of a bullish trend (uptrend). In this candlestick, the 2nd candle will engulf the 1st bear candle's above previous candle highs. This indicates a huge surge in buying pressure. Bullish Engulfing can appear in between continuous uptrend also, but shouldn't be traded unless paired with some sort of strategy to increase the profit factor and winning percentage.

How to trade Bullish Engulfing candlestick:

Buy after the candle fully closes then place a stop loss below the low of the candle and take profit up to the next resistance.

Bearish Engulfing:

It's the just opposite of a bullish engulfing candlestick which is found in an uptrend indicating the beginning of the bearish trend (downtrend). Here the 1st candle is small and bullish while the next candle engulfs the previous candle's body and closes below the low.

Hammer Candlestick:

Hammer candlesticks, like the name - look like hammers. Usually a standalone candlestick often found at the bottom of a downtrend, having a long wick below its body indicating bulls taking control over bears - and that the market is most likely to reverse. A hammer can be either bullish or bearish, as shown below.

The hammer candle itself represents that initially bears pushed the price down heavily and after that bull has taken over control - the price closes near its open price.

Hammer and Hanging Man are identical - the only difference is formed in a trend.

Identifying a Hammer Candlestick:

Before considering any candlestick as a hammer check few characteristics:
• Open and close of the candlestick is not so far.
• The length of the candle should be at least twice of the body.
• The candle should appear after a long downtrend, not short-term.

How to trade Hammer candlestick:
• Buy after the closing of the candle and stop loss below the low of the candle and take profits is up to you but we consider it till previous resistance.

Hanging Man Candlestick:

Hanging Man candlestick is near the same as hammer candlestick, the only difference is it is often found on the top of the uptrending markets, having a long wick below its body. Usually indicating the market is most likely to reverse.

How to Identify a Hanging Man Candlestick?
• Open and close of the candlestick is not so far.
• The length of the candle should be twice or thrice of the body or more.
• The candle should appear after a good downtrend, not a short- term downtrend.
• How to trade Hammer candlestick:
• Buy after the closing of the candle and stop-loss above the high of the candle.

Marubozu candlestick:

Marubozu is a Japanese candlestick pattern, consisting of a single candle, the word Marubozu is a Japanese word that holds the meaning 11 Bald". Also, Marubozu has no upper and lower wicks which indicates that the instrument is traded heavily in either direction. There are 2 types of Marubozu:

Bullish Marubozu:

Bullish Marubozu indicates that buyers are more interested in buying and the price immediately spikes. Here Open is equal to Low and close is equal to High. Usually, Bullish Marubozu appears in an uptrend which indicates that the trend is most likely to continue while appearing in a downtrend implies a possible trend reversal.

Bearish Marubozu:

Bearish Marubozu represents traders selling aggressively - which usually results in a spike down in price. The candle has its Open is equal to High and Close is equal to Low. It usually appears in a downtrend which indicates a continuation of the trend, while appearing in an uptrend implies possible trend reversal.

It's a bit difficult to really understand candle types without seeing them live in action - the images below should help gain a basic use case for each.