Pattern Study

Unit 1-Topic 6

Prof.Rugved Shivgan

1. Head and Shoulders

- The head and shoulders pattern can be either head and shoulders, top or head and shoulders bottom.

- The Charts are a picture of a head and shoulders movement, which portrays three successive rallies and reactions with the second one making the highest/lowest point.

1.a.Head and Shoulders (Top reversal)

- A Head and Shoulders (Top) is a reversal pattern which occurs following an extended uptrend forms and its completion marks a trend reversal.

- The pattern contains three successive peaks with the middle peak (head) being the highest and the two outside peaks (shoulders) being low and roughly equal.

- The reaction lows of each peak can be connected to form support, or a neckline

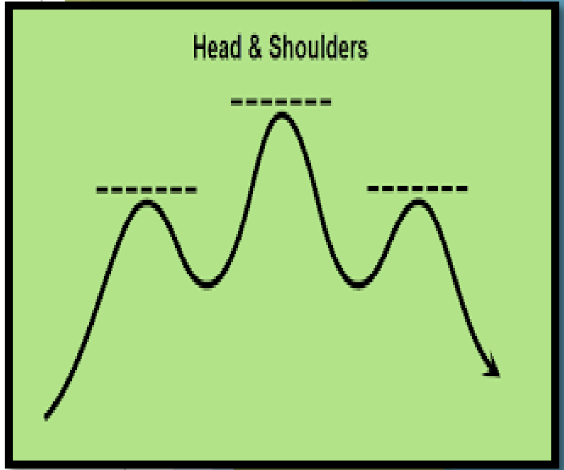
Features of Head & Shoulder Pattern

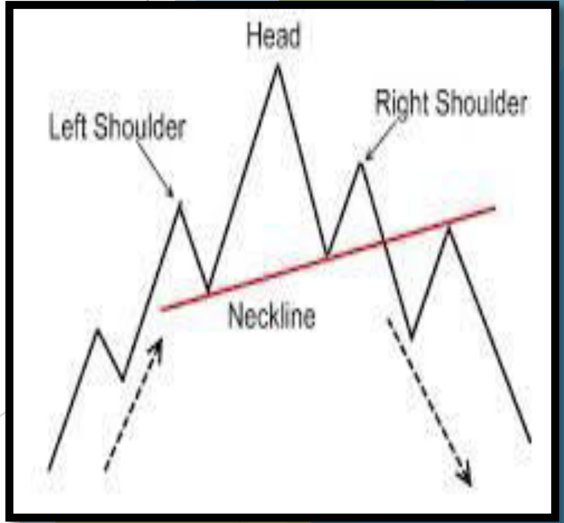
- **Prior trend:** Without a prior uptrend to reverse, there cannot be a head and shoulders reversal pattern, or any reversal pattern for that matter.

- **Left shoulder:** While in an uptrend, the left shoulder forms a peak that marks the high point of the current trend. It is formed usually at the end of an extensive advance during which volume is quite heavy. At the end of the left shoulder there is usually a dip or recession which typically occurs on low volume.

- **Head:** From the low of the left shoulder, an advance begins that exceeds the previous high and marks the top of the head. At this point, in order confirm to proper form, prices must come down somewhere near the low of the left shoulder –somewhat lower perhaps or somewhat higher but in any case, below the top of the left shoulder.

- **Right shoulder:** The right shoulder is formed when the low of the head advances again. The peak of the right shoulder is almost equal in height to that of the left shoulder but lower than the head. While symmetry is preferred, sometimes the shoulders can be out of whack. The decline from the peak of the right shoulder should break the neckline.



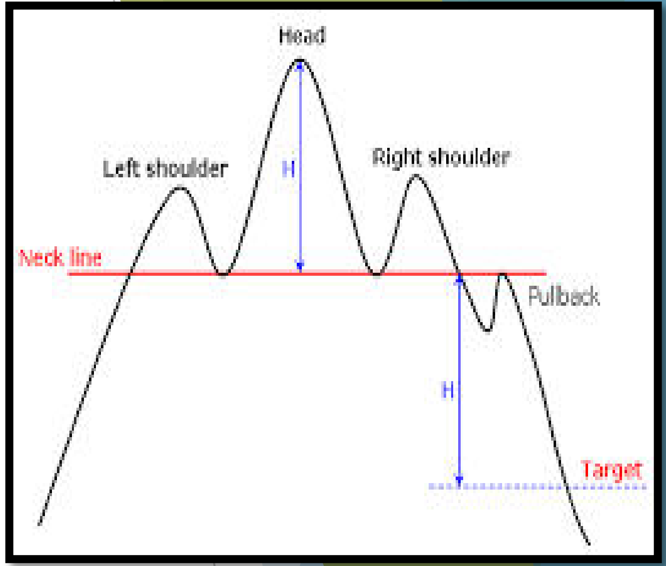


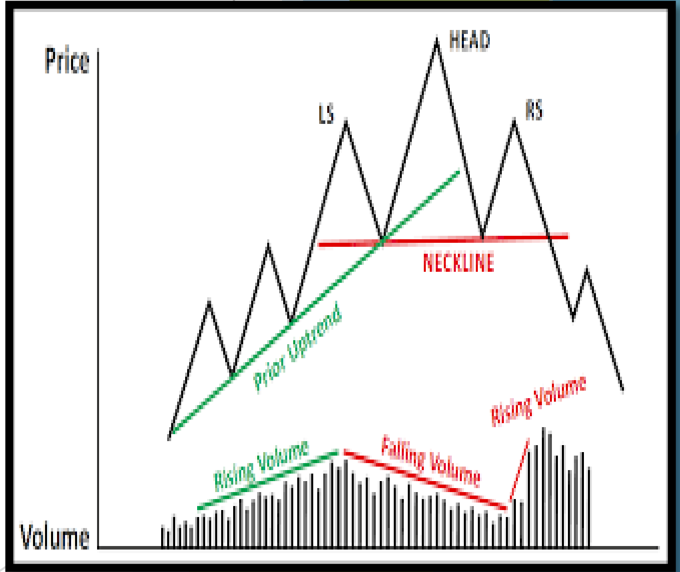
- **Neckline:** A neckline can be drawn across the bottoms of the left shoulder, the head and the right shoulder. A breaking of this neckline on a decline from the right shoulder is the final confirmation and completes the head and shoulder formation.

- **Volume:** Ideally, but not always, volume during the advance of the left shoulder should be higher than during the advance of the head. These decline in volume along with new highs that form the head serve as a warning sign. The next warning sign comes when volume increases on the decline from the peak of the head. Final confirmation comes when volume further increases during the decline of the right shoulder.

- **Neckline break:** The head and shoulders pattern is said to be complete only when the neckline support is broken. Ideally, this should also occur in a convincing manner with an expansion in volume.

- **Price target:** After breaking neckline support, the projected price decline is found by measuring the distance from the neckline to the top of the head. Price target is calculated by subtracting the above distance from the neckline. Any price target should serve as a rough guide, and other factors such as previous support levels should be considered as well.





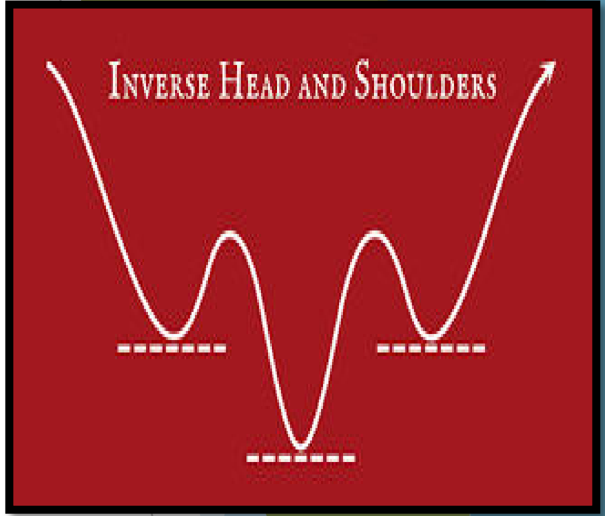
Head & Shoulder Example

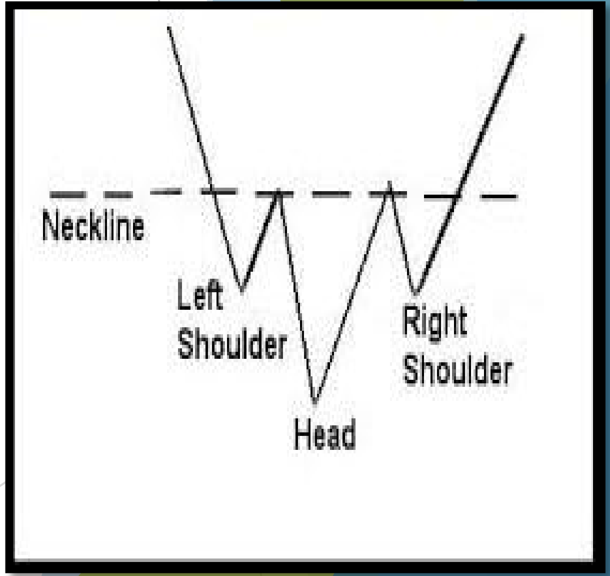
1.b.Inverted head and shoulders/ Head and shoulders bottom

- The head and shoulders bottom is the inverse of the H&S Top.
- As a major reversal pattern, the head and shoulders bottom forms after a downtrend, and its completion marks a change in trend.
- The pattern contains three troughs in successive manner with the two outside troughs namely the right and the shoulder being lower in height than the middle trough (head) which is the deepest.
- Ideally, the two shoulders i.e. the right and the left shoulder should be equal in height and width. The reaction highs in the middle of the pattern can be connected to form resistance, or a neckline.

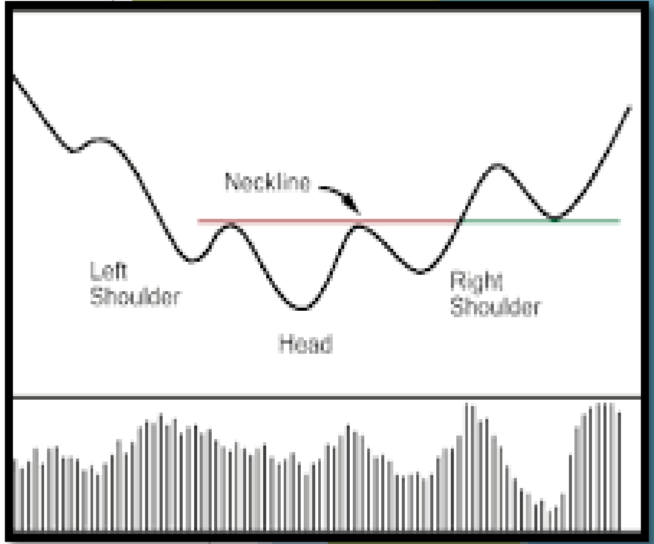
Features of Head & Shoulder Bottom Pattern

- **Prior trend:** There cannot be a head and shoulders bottom formation, without a prior downtrend to reverse.
- **Left shoulder:** The left shoulder forms a trough that marks a new reaction low in the current trend. After forming this trough, an advance ensues to complete the formation of the left shoulder.
- **Head:** After the formation of the left shoulder, a decline begins that exceeds the previous low and forms a point at an even lower point. After making a bottom, the high of the subsequent advance forms the second point of the neckline.
- **Right shoulder:** Right shoulder is formed when the high of the head begins to decline. The height of the right shoulder is always less than the head and is usually in line with the left shoulder, though it can be narrower or wider. When the advance from the low of the right shoulder breaks the neckline, the head and shoulders reversal is complete.
- **Neckline:** The neckline forms by connecting two reaction highs. The first reaction marks the end of the left shoulder and the beginning of the head. The second reaction marks the end of the head and the beginning of the right shoulder. Depending on the relationship between the two reaction highs, the neckline can slope up, slope down, or be horizontal. The slope of the neckline will affect the pattern's degree of bullishness: an upward slope is more bullish than downward slope.



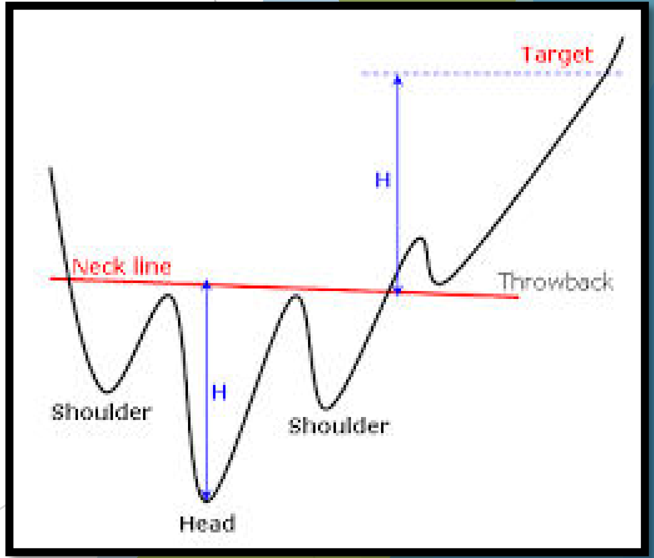


- **Volume:** The decline of the volume of the left shoulder is usually heavy and selling pressure is also very intense. The selling continues to be intense even during the decline that forms the low of the head. After this low, subsequent volume patterns should be watched carefully to look for expansion during the advances. The advance from the low of the head should be accompanied by an increase in volume. After the formation the second neckline point by the reaction high, there should be a decline in the right shoulder accompanied with light volume. The most important moment for volume occurs on the advance from the low of the right shoulder. For a breakout to be considered valid there needs to be an expansion of volume on the advance and during the breakout.



- **Neckline break:** For a head and shoulders bottom, this must occur in a convincing manner with an expansion of volume.

- **Price target:** Once the neckline resistance is broken, the projected advance is calculated by measuring the distance from the neckline to the bottom of the head. This distance is then added to the neckline to reach a price target. Any price target should serve as a rough guide and other factors should be considered as well.

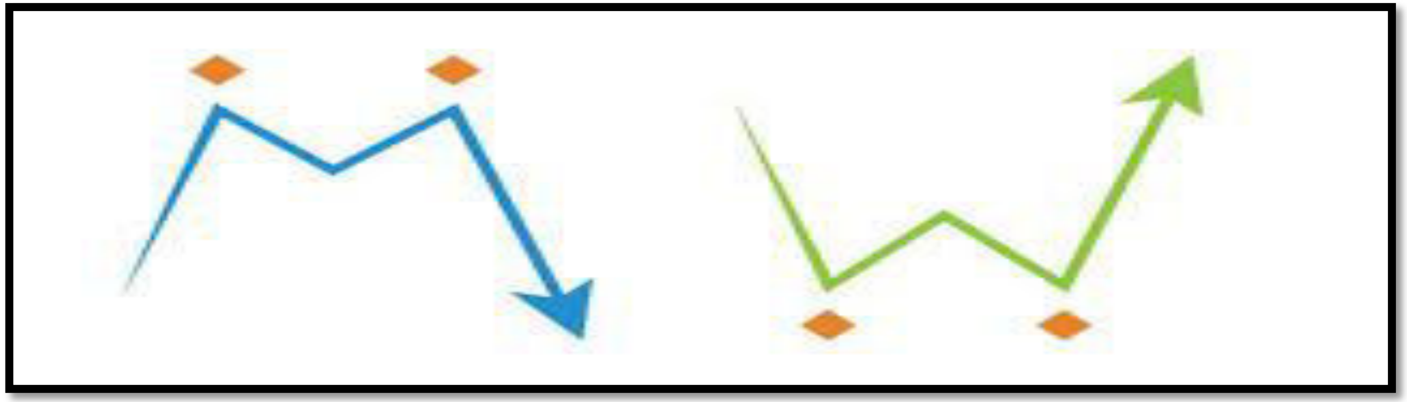


Inverted Head & Shoulder Example

2.Double tops and bottoms

- These are considered to be among the most familiar of all chart patterns and often signal turning points, or reversals.

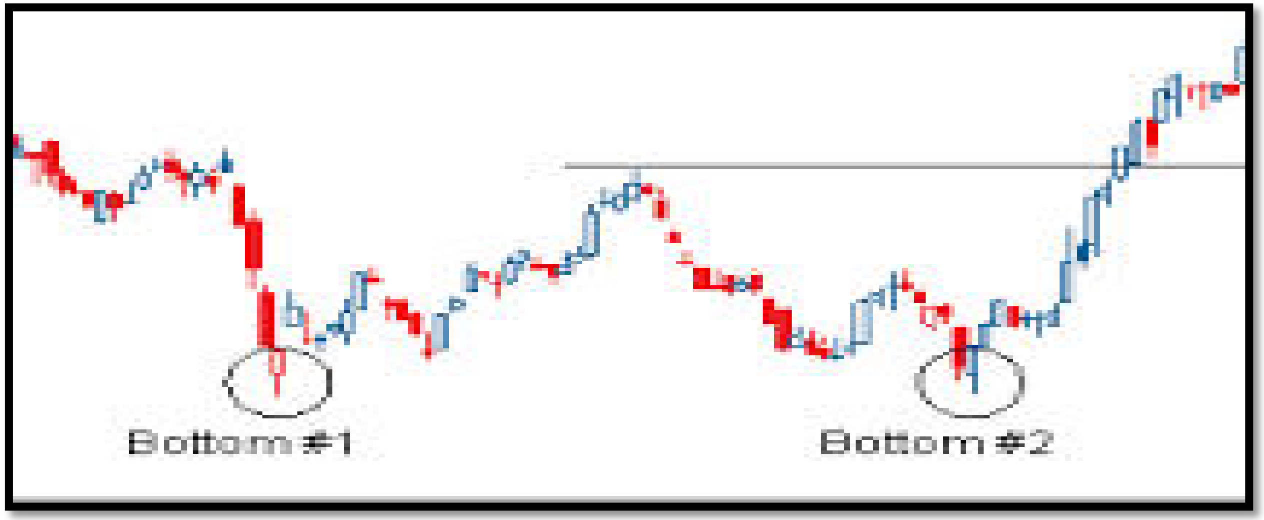
- The double top resembles the letter “M”. Conversely, the double bottom resembles a “W” formation; in reverse of the double top.



2.a.Double bottom

- It is used to describe a drop in the value of a stock (index), bounces back and then another drop to the similar level as the previous low and finally rebounds again.

- A double bottom is a reversal pattern which occurs following an extended downtrend. The buy signal is when price breaks above the reaction high which is formed between the two lows.



Features of Double Bottom Pattern

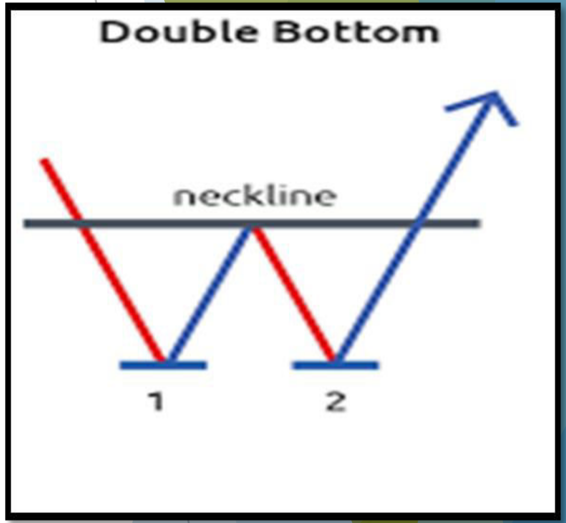
- **Prior trend:** In the case of the double bottom, a significant downtrend of several months should be in place.

- **First trough:** It marks the lowest point of the current trend. Though it is fairly normal in appearance and the downtrend remains firmly in place.

- **Peak:** After the first trough is reached, an advance ranging from 10-20% usually takes place. An increase in the volume from the first trough signals an early accumulation. The peaks high is sometimes rounded or drawn out a bit because of the hesitation in going back. This hesitation is an indication of an increase in demand, but this increase is not strong enough for a breakout.

- **Second trough:** The decline off the reaction high usually occurs with low volume and meets support from the previous low. Support from the previous low should be expected.

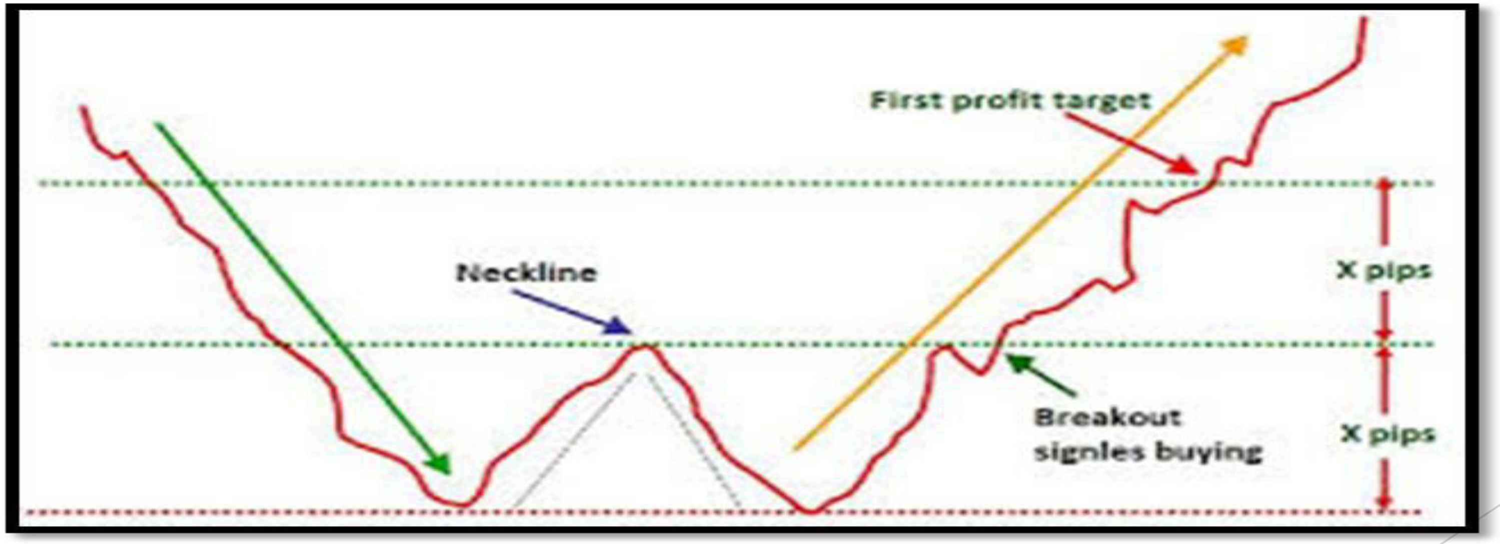
- **Advance from trough:** Volume gains more importance in the double bottom than in the double top. The advance of the second trough should be clearly evidenced by the increasing volume and buying pressure. An accelerated ascent, perhaps marked with a gap or two, also indicates a potential change in sentiment.



- **Resistance break:** The double top and trend reversal are considered incomplete, even after they trade up to resistance. Breaking resistance from the highest point between the troughs completes the double bottom. This too should occur with an increase in volume and/or an accelerated ascent.

- **Resistance turned support:** Broken resistance becomes potential support and there is sometimes a test of this newfound support level with the first correction. Such a test can offer a second chance to close a short position or initiate a long.

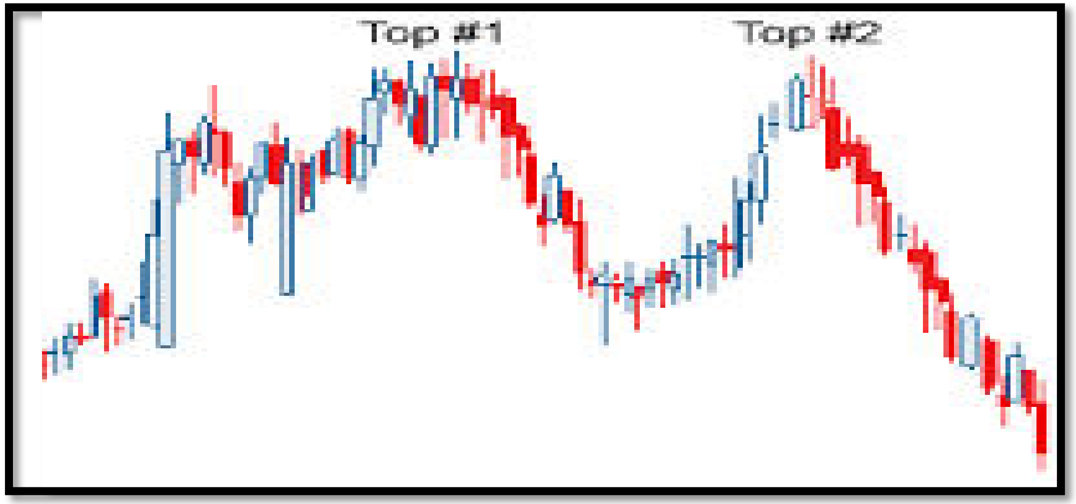
- **Price target:** Target is estimated by adding the distance from the resistance breakout to trough lows on top of the resistance break. This would imply that the bigger the formation is, the larger the potential advance.

- 

2.b.Double Top

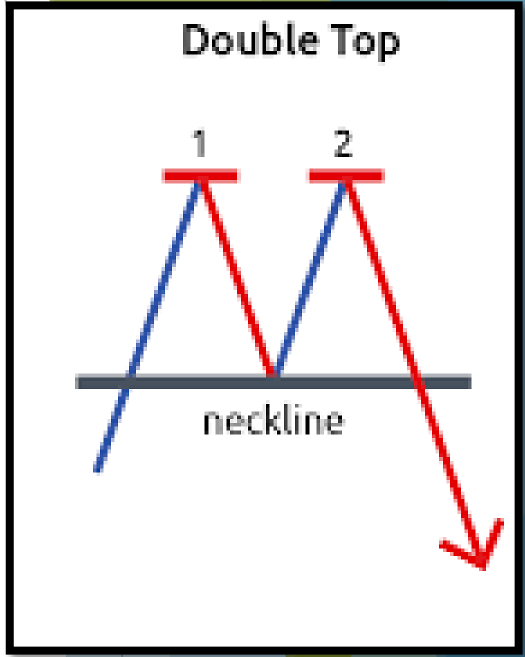
- It is used to describe a rise in the value of a stock (index), and followed by a drop & another rise to the similar level as the previous high and finally fall again.

- A double top is a reversal pattern which occurs following an extended uptrend. The sell signal is when price breaks below the reaction low which is formed between the two Highs.



Features of Double Top Pattern

- **Prior trend:** In the case of the double top, a significant uptrend of several months should be in place.
- **First Peak:** It marks the highest point of the current trend. Though it is fairly normal in appearance and the uptrend remains firmly in place.
- **Trough:** After the first peak is reached, a correction ranging from 10-20% usually takes place. An increase in the volume from the first peak signals an early distribution.. The trough low is sometimes rounded or drawn out a bit because of the hesitation in going back. This hesitation is an indication of an increase in supply, but this increase is not strong enough for a breakout.
- **Second Peak:** The rise off from the reaction low usually occurs with low volume and meets resistance from the previous high. Resistance from the previous high should be expected.
- **Decline from Peak:** The decline from the second peak should be clearly evidenced by the increasing volume and selling pressure. An accelerated ascent, perhaps marked with a gap or two, also indicates a potential change in sentiment.



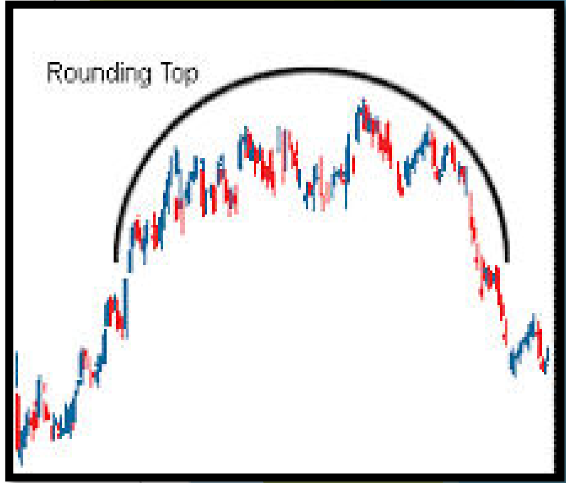
- **Support break:** Breaking support from the lowest point between the troughs completes the double top. This too should occur with an increase in volume and/or an accelerated ascent.

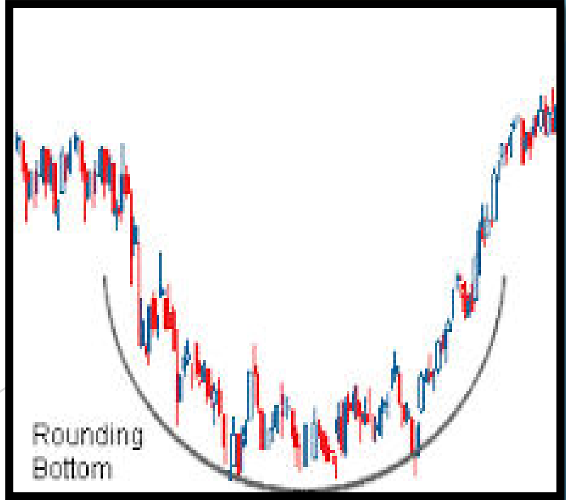
- **Support turned Resistance:** Broken support becomes potential resistance and there is sometimes a test of this newfound resistance level with the first Pullback. Such a test can offer a second chance to close a long position or initiate a short.

- **Price target:** Target is estimated by subtracting the distance from the support breakout to Peak Highs on top of the support break. This would imply that the bigger the formation is, the larger the potential decline.

3.Rounded top and bottom

- Another shape which a top and bottom can take is one in which the reversal is "rounded".
- The rounded bottom formation forms when the market gradually yet steadily shifts from a bearish to bullish outlook while in the case of a rounded top, from bullish to bearish.
- The Rounded Top formation consists of a gradual change in trend from up to down.
- The Rounded Bottom formation consists of a gradual change in trend from down to up. This formation is the exact opposite of a Rounded Top Formation.
- The prices take on a bowl shaped pattern as the market slowly and casually changes from an upward to a downward trend.
- In a true Rounded Bottom, the volume decreases as the price decreases, this signifies a decrease in the selling pressure. A very little trading activity can be seen when the price movement becomes neutral and goes sideways and the volumes are also low. Then, as prices start to increase, the volume increases.





4.a. Triple Tops

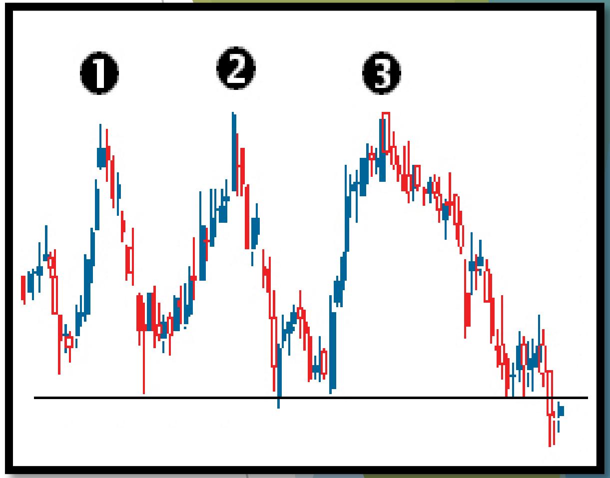
- This reversal pattern is formed when a security that is trending upward tests a similar level of resistance three times without breaking through.

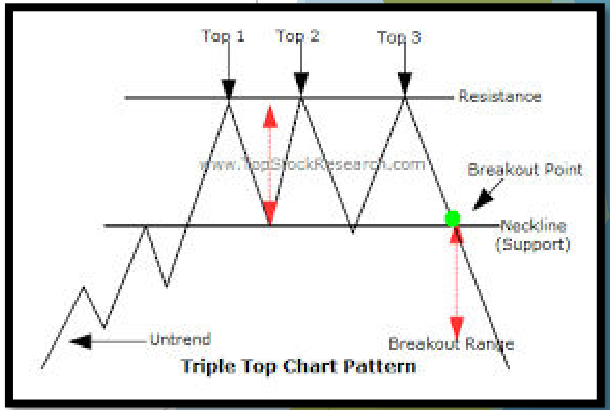
- The first step in this pattern is the creation of a new high in an uptrend that is stalled by selling pressure, which forms a level of resistance. The selling pressure causes the price to fall until it finds a level of support, as buyers move back into the security. The buying pressure sends the price back up to the area of resistance the security previously met. Again, the sellers enter the market and send the security back down to the support level.

- This up-and-down movement is repeated for the third time; but this time the buyers, after failing three times, give up on the security, and the sellers take over. Upon falling through the level of support, the security is expected to trend downward.

- In the triple-top formation, each test of resistance at the upper end should be marked with declining volume at each successive peak. And again, when the price breaks below the support level, it should be accompanied by high volume.

- Once the signal is formed, the price objective is based on the price distance between the level of resistance and support. This is then deducted from the breakout point.





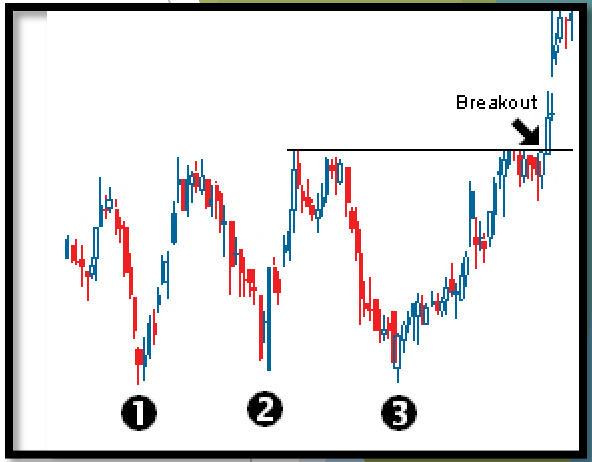
4.b. Triple Bottom

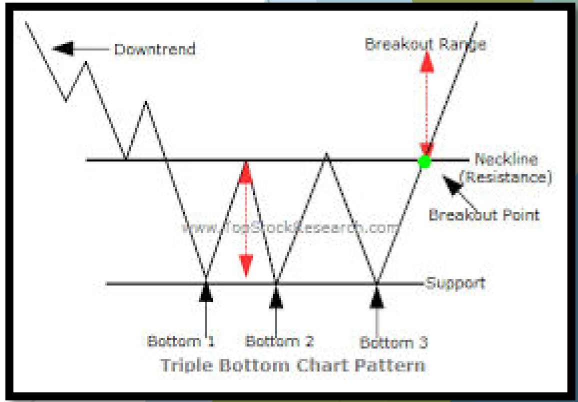
- This bullish reversal pattern has all of the same attributes as the triple top but signals a reversal of a downward trend.

- This pattern begins by setting a new low in a downtrend, which is followed by a rally to a high. This sets up the range of trading for the triple-bottom pattern. After hitting the high, the price again comes under selling pressure, which sends it back down to the previous low. Buyers again move back into the security at this support level, sending the price back up again, usually to the previous high. This is repeated a third time, but after failing again to move to a new low, the pattern is complete when the security moves above the resistance level to begin trading in an uptrend.

- In this pattern, volume plays a role similar to the triple top, declining at each trough as it tests the support level, which is a sign of diminishing selling pressure. Again, volume should be high on a breakout above the resistance level on the completion of the pattern.

- The price objective will also initially be calculated as the distance of the chart pattern added to the price breakout.

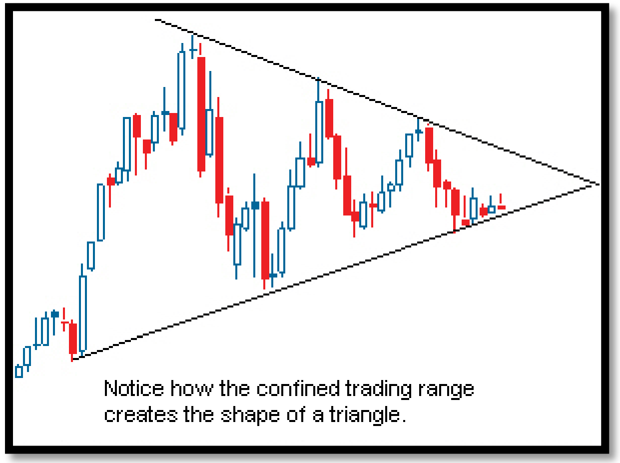




5.Triangle

- A triangle is a technical analysis pattern created by drawing trendlines along a price range that gets narrower over time because of lower tops and higher bottoms.

- Variations of a triangle include ascending, descending and symmetrical triangles.



5.a.Symmetrical Triangle

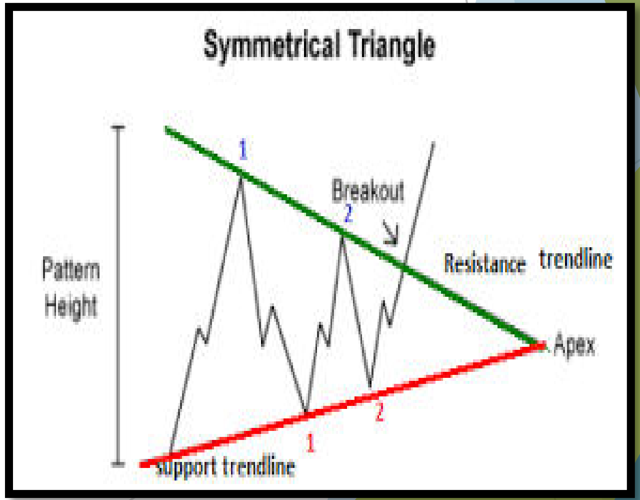
- A chart pattern used in technical analysis that is easily recognized by the distinct shape created by two converging trendlines. The pattern is identified by drawing two trendlines that connect a series of sequentially lower peaks and a series of sequentially higher troughs.

- Both trendlines act as barriers that prevent the price from heading higher or lower, but once the price breaches one of these levels, a sharp movement often follows.

- A symmetrical triangle is generally regarded as a period of consolidation before the price moves beyond one of the identified trendlines.

- A break below the lower trendline is used by technical traders to signal a move lower, while a break above the upper trendline signals the beginning of a move upward.

- A sharp increase in volume or any other available technical indicator to confirm a breakout.



5.b.Ascending Triangle

- An ascending triangle is a bullish chart pattern.
- In an ascending triangle, one trendline is drawn horizontally at a level that has historically prevented the price from heading higher, while the second trendline connects a series of increasing troughs.
- Traders enter into long positions when the price of the asset breaks above the top resistance.
- An ascending triangle is generally considered to be a continuation pattern, meaning that it is usually found amid a period of consolidation within an uptrend.
- The most common price target is generally set to be equal to the entry price plus the vertical height of the triangle.
- An ascending triangle is the bullish counterpart of a descending triangle.

5.c.Descending Triangle

- A bearish chart pattern used in technical analysis that is created by drawing one trendline that connects a series of lower highs and a second trendline that has historically proven to be a strong level of support.

- Traders watch for a move below support, Once the breakdown occurs, traders enter into short positions and aggressively push the price of the asset lower.

- Descending Triangle clearly shows that the demand for an asset is weakening, and when the price breaks below the lower support, it is a clear indication that downside momentum is likely to continue or become stronger.

- The most common price targets are generally set to equal the entry price minus the vertical height between the two trendlines.

- A descending triangle is the bearish counterpart of an ascending triangle.

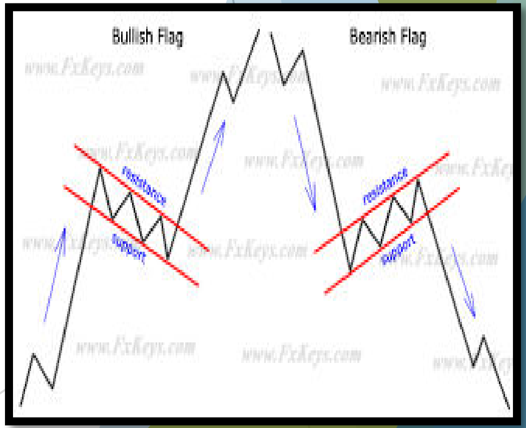
6.Flag

- The flag pattern forms what looks like a rectangle. The rectangle is formed by two parallel trendlines that act as support and resistance for the price until the price breaks out.

- In general, the flag will not be perfectly flat but will have its trendlines sloping.

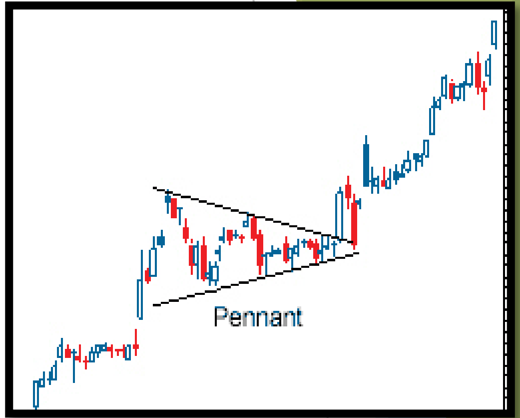
- In general, the slope of the flag should move in the opposite direction of the initial sharp price movement; so if the initial movement were up, the flag should be downward sloping.

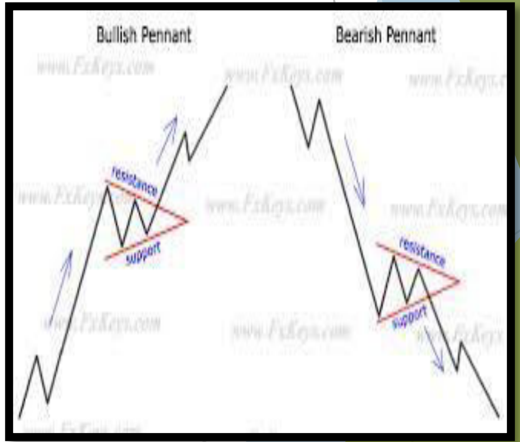
- The buy or sell signal is formed once the price breaks through the support or resistance level, with the trend continuing in the prior direction. This breakthrough should be on heavier volume to improve the signal of the chart pattern.



7.Pennant

- Pennant looks more like a triangle.
- These patterns are formed when there is a sharp price movement followed by generally sideways price movement & The pattern is complete when there is a price breakout in the same direction of the initial sharp price movement.
- The pennant forms what looks like a symmetrical triangle, where the support and resistance trendlines converge towards each other.
- The pennant pattern does not need to follow the same rules found in triangles, where they should test each support or resistance line several times.
- Also, the direction of the pennant is not as important as it is in the flag; however, the pennant is generally flat.





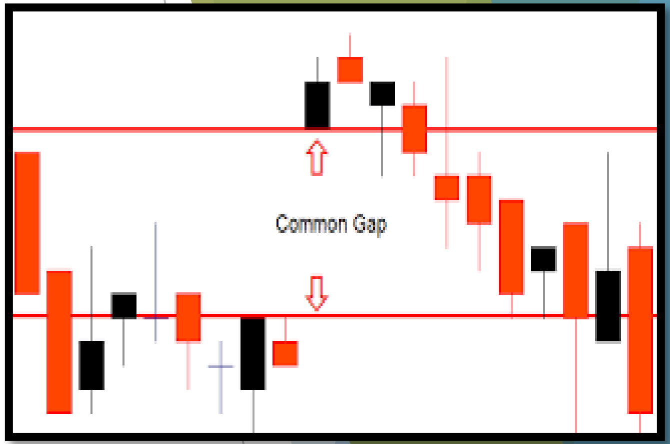
Gap theory

- A gap is an area on a price chart in which there were no trades.
- Normally this occurs after the close of the market on one day and the next day's open.
- Gaps can offer evidence that something important has happened to the fundamentals or the psychology of the crowd that accompanies this market movement.
- Gaps appear more frequently on daily charts, where every day is an opportunity to create an opening gap.
- Gaps can be subdivided into four basic categories:

- **Common gap**
- **Breakaway gap**
- **Runaway/ Continuation gap**
- **Exhaustion gap**

1.Common gaps

- Sometimes referred to as a trading gap or an area gap, the common gap is usually uneventful.
- This gap occurs characteristically in nervous markets and is generally closed within few days.
- A common gap usually appears in a trading range or congestion area and reinforces the apparent lack of interest in the stock at that time.
- Many times this is further exacerbated by low trading volume.
- Being aware of these types of gaps is good, but doubtful that they will produce trading opportunities.

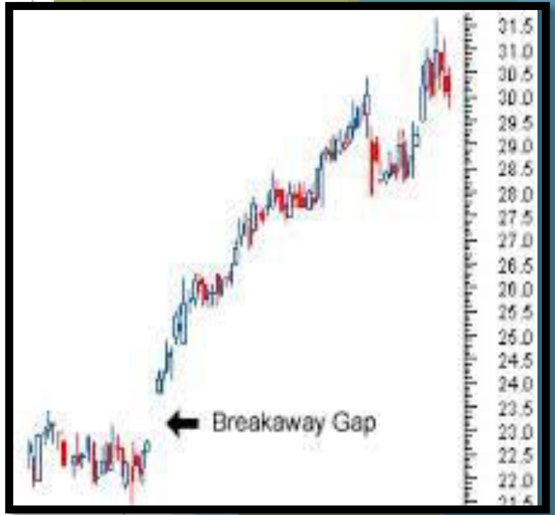


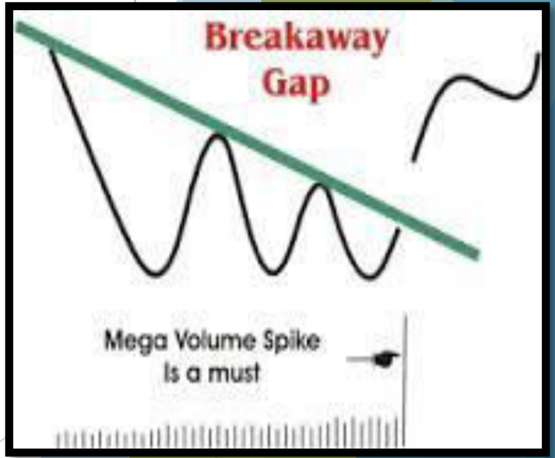
2.Breakaway gaps

- They occur when the price action is breaking out of their trading range or congestion area.

- To understand gaps, one has to understand the nature of congestion areas in the market. A congestion area is just a price range in which the market has traded for some period of time, usually a few weeks or so. The area near the top of the congestion area is usually resistance when approached from below. Likewise, the area near the bottom of the congestion area is support when approached from above. To break out of these areas requires market enthusiasm and either many more buyers than sellers for upside breakouts or more sellers than buyers for downside breakouts.

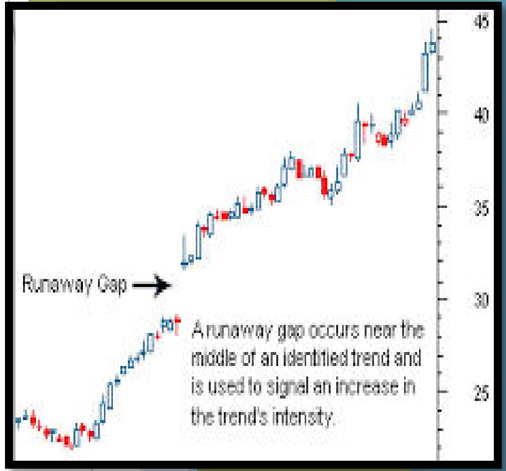
- Volume will (should) pick up significantly, for not only the increased enthusiasm.The point of breakout now becomes the new support (if an upside breakout) or resistance (if a downside breakout).





3.Runaway gaps

- Runaway gaps are also called measuring by increased .
- For runaway gaps to the upside, it usually represents traders who did not get in during the initial move of the up trend and while waiting for a retracement in price, decided it was not going to happen. Increased buying interest happens all of a sudden and the price gaps above the previous day's close. This type of runaway gap represents an almost panic state in traders. Also, a good uptrend can have runaway gaps caused by significant news events that cause new interest in the stock.
- Runaway gaps can also happen in down trends. This usually represents increased liquidation of that stock by traders and buyers who are standing on the sidelines. The price will continue to drop and gap down to find buyers. Not a good situation.



4.Exhaustion gaps

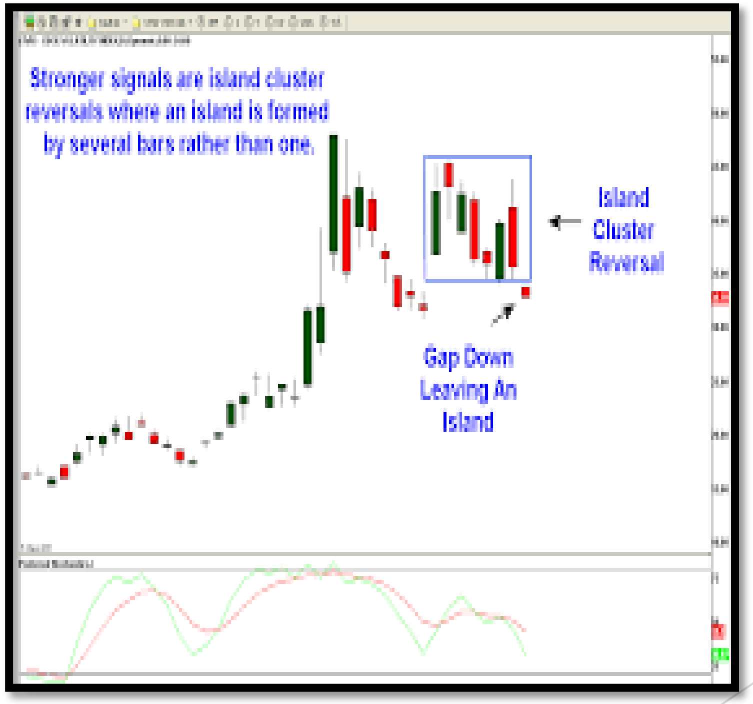
- Exhaustion gaps are those that happen near the end of a good up or down trend. They are many times the first signal of the end of that move. They are identified by high volume and large price difference between the previous day's close and the new opening price. They can easily be mistaken for runaway gaps if one does not notice the exceptionally high volume.

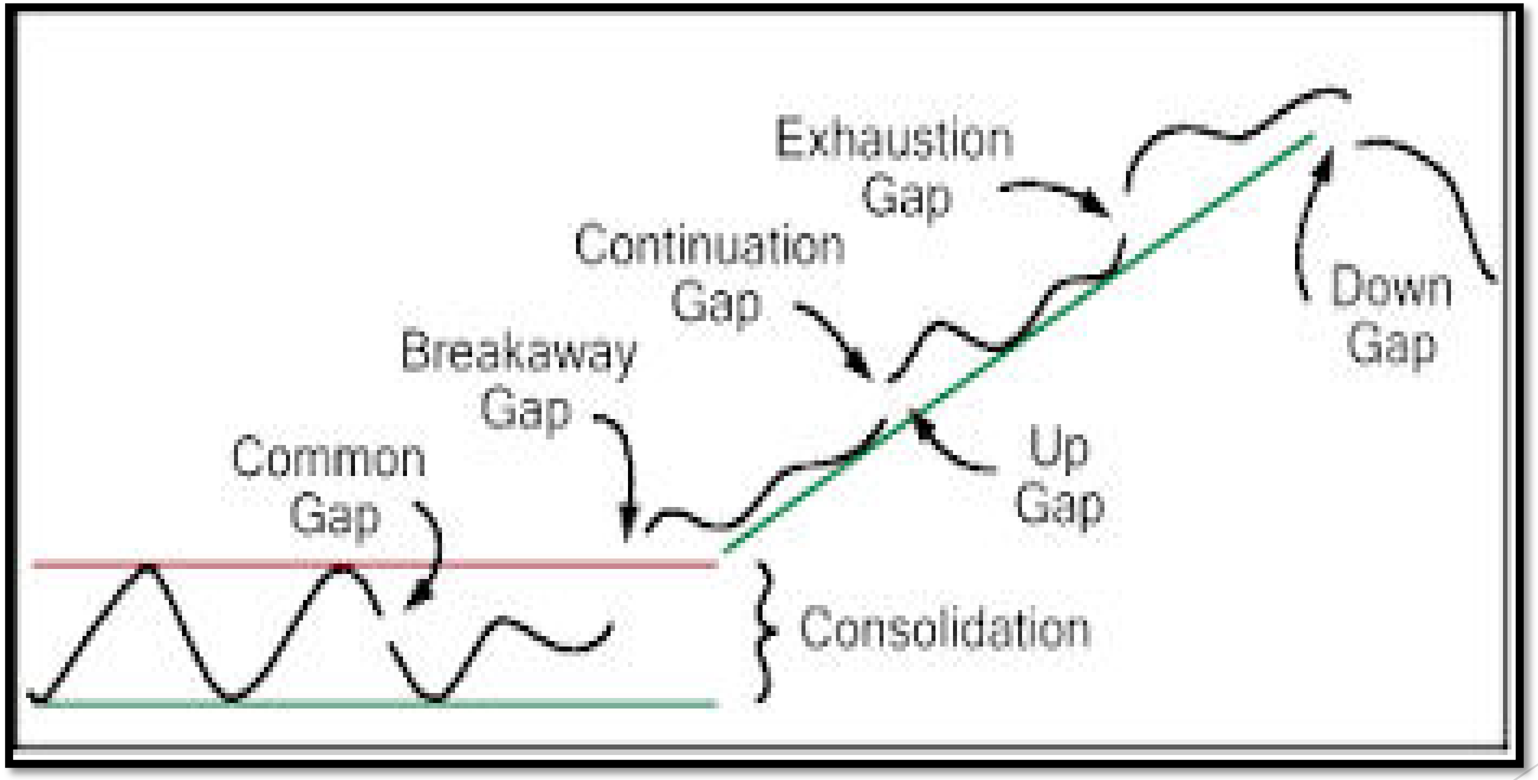
- It is almost a state of panic if during a long down move pessimism has set in. Selling all positions to liquidate holdings in the market is not uncommon. Exhaustion gaps are quickly filled as prices reverse their trend. Likewise if they happen during a bull move,

- Exhaustion gaps are probably the easiest to trade and profit from.

5.Island cluster

- Island clusters are identified by an exhaustion gap followed by a breakaway gap in opposite direction. They are powerful reversal signals




Exhaustion Gap
Continuation Gap
Breakaway Gap
Common Gap
Up Gap
Down Gap
Consolidation

THANK YOU