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Chart School

Indicators Part 1

Introduction

This article is designed to introduce the concept of indicators and explain how to use them in your analysis. We will shed light on the difference between leading and lagging indicators, as well as look into the benefits and drawbacks. Many, if not most, popular indicators are shown as oscillators. With this in mind, we will also show how to read oscillators and explain how signals are derived. Later in this series on indicators, we will turn our focus to specific indicators and provide examples of signals in action.

What is an Indicator?

An indicator is a series of data points that are derived by applying a formula to the price data of a security. Price data includes any combination of the open, high, low or close over a period of time. Some indicators may use only the closing prices, while others incorporate volume and open interest into their formulas. The price data is entered into the formula and a data point is produced.

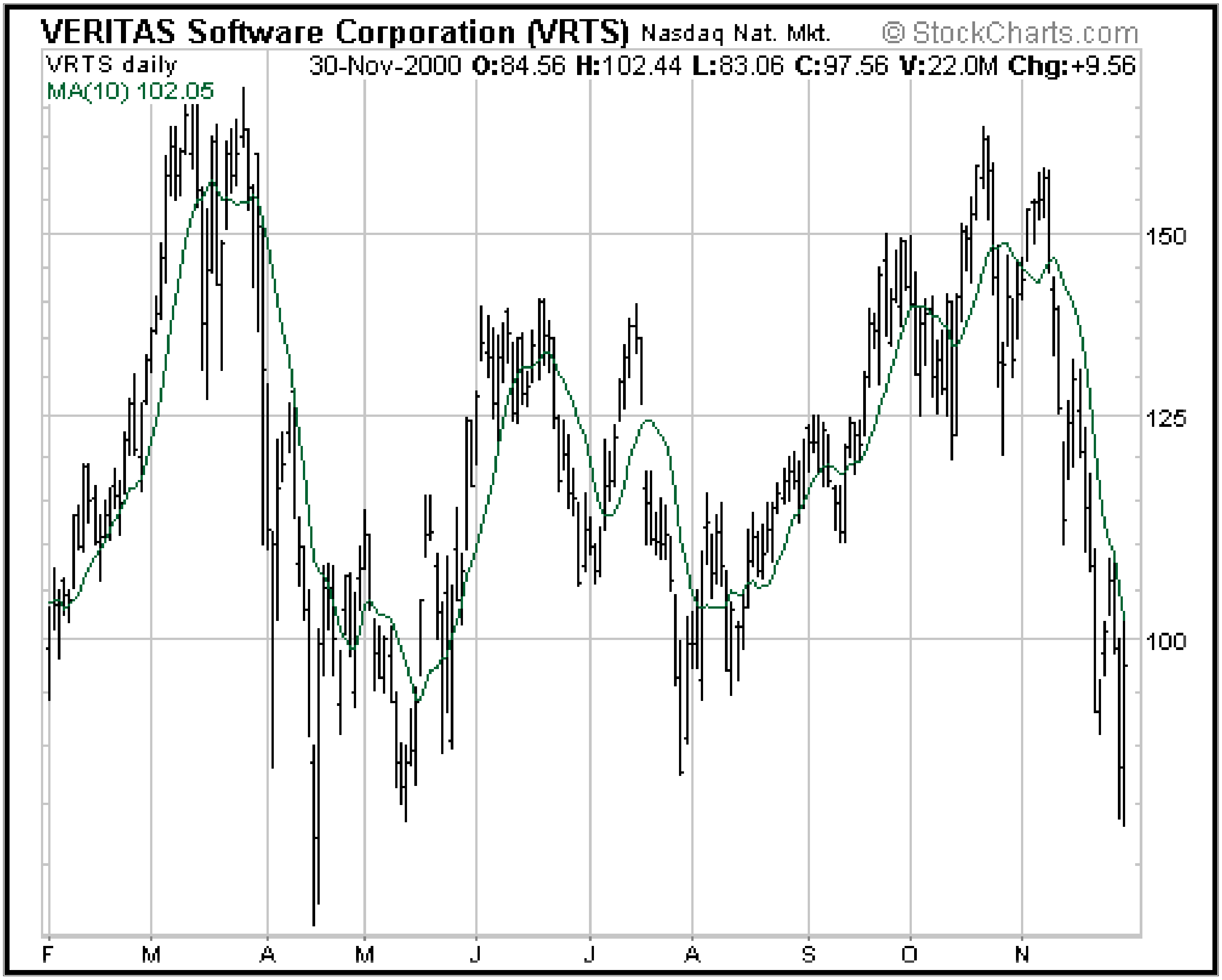
For example, the average of 3 closing prices is one data point ((41+43+43)/3=42.33). However, one data point does not offer much information and does not an indicator make. A series of data points over a period of time is required to create valid reference points to enable analysis. By creating a time series of data points, a comparison can be made between present and past levels. For analysis purposes, indicators are usually shown in a graphical form above or below a security’s price chart. Once shown in graphical form, an indicator can then be compared with the corresponding price chart of the security. Sometimes indicators are plotted on top of the price plot for a more direct comparison.

What does an Indicator Offer?

An indicator offers a different perspective from which to analyze the price action. Some, such as moving averages, are derived from simple formulas and the mechanics are relatively easy to understand. Others, such as Stochastics, have complex formulas and require more study to fully understand and appreciate. Regardless of the complexity of the formula, indicators can provide unique perspective on the strength and direction of the underlying price action.

A simple moving average is an indicator that calculates the average price of a security over a specified number of periods. If a security is exceptionally volatile, then a moving average will help to smooth the data. A moving average filters out random noise and offers a smoother perspective of the price action. Veritas (VRTS) displays a lot of volatility and an analyst may have difficulty discerning a trend. By applying a 10-day simple moving average to the price action, random fluctuations are smoothed to make it easier to identify a trend.

Veritas (VRTS)



Why Use Indicators?

Indicators serve three broad functions: to alert, to confirm and to predict.

- An indicator can act as an alert to study price action a little more closely. If momentum is waning, it may be a signal to watch for a break of support. Or, if there is a large positive divergence building, it may serve as an alert to watch for a resistance breakout.
- Indicators can be used to confirm other technical analysis tools. If there is a breakout on the price chart, a corresponding moving average crossover could serve to confirm the breakout. Or, if a stock breaks support, a corresponding low in the On-Balance-Volume (OBV) could serve to confirm the weakness.
- Some investors and traders use indicators to predict the direction of future prices. In his column on 29-Oct, Rex Takasugi shows how the Commodity Channel Index (CCI)can be used to generate buy signals for the Russell 2000.

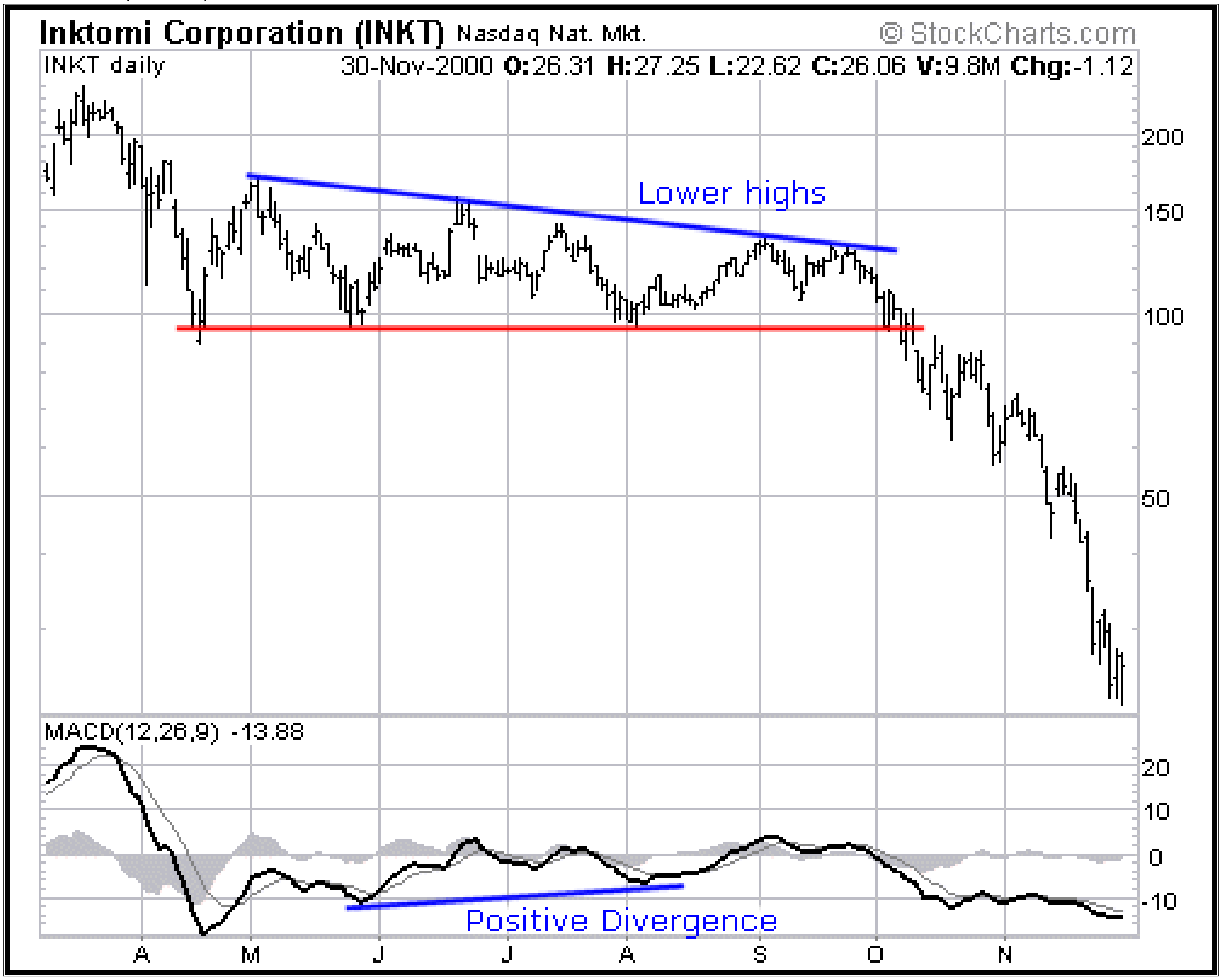
Tips for Using Indicators

Indicators indicate. This may sound straightforward, but sometimes traders ignore the price action of a security and focus solely on an indicator. Indicators filter price action with formulas. As such, they are derivatives and not direct reflections of the price action. This should be taken into consideration when applying analysis. Any analysis of an indicator should be taken with the price action in mind. What is the indicator saying about the price action of a security? Is the price action getting stronger? Weaker?

Even though it may be obvious when indicators generate buy and sell signals, the signals should be taken in context with other technical analysis tools. An indicator may flash a buy signal, but if the chart pattern shows a descending triangle with a series of declining peaks, it may be a false signal.

On the Inktomi (INKT) chart, MACD MACD improved from April to August and formed a positive divergence in August. All the earmarks of a MACD buying opportunity were present, but the stock failed to break above the resistance and exceed its previous reaction high. This non-confirmation from the stock should have served as a warning sign against a long position. For the record, a sell signal occurred when the stock broke support from the descending triangle in early Oct-00 .

Inktomi (INKT)



As always in technical analysis, learning how to read indicators is more of an art than a science. The same indicator may exhibit different behavioral patterns when applied to different stocks. Indicators that work well for IBM might not work the same for Delta Airlines. Through careful study and analysis, expertise with the various indicators will develop over time. As this expertise develops, certain nuances as well as favorite setups will become clear.

There are hundreds of indicators in use today, with new indicators being created every week. Technical analysis software programs come with dozens of indicators built in, and even allow users to create their own. Given the amount of hype that is associated with indicators, choosing an indicator to follow can be a daunting task. Even with the introduction of hundreds of new indicators, only a select few really offer a different perspective and are worthy of attention. Strangely enough, the indicators that usually merit the most attention are those that have been around the longest time and have stood the test of time.

When choosing an indicator to use for analysis, choose carefully and moderately. Attempts to cover more than five indicators are usually futile. It is best to focus on two or three indicators and learn their intricacies inside and out. Try to choose indicators that complement each other, instead of those that move in unison and generate the same signals. For example, it would be redundant to use two indicators that are good for showing overbought and oversold levels, such as Stochastics and RSI. Both of these indicators measure momentum and both have overbought/oversold levels.

Written by Arthur Hill

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